## WHAT IS CLAIMED IS:

1. Material capable of forming clear, concentrated, biodegradable, fabric softener compositions, said material being selected from the group consisting of:

compound selected from the group consisting of: A. 1,2-butanediol, 2,3,3-trimethyl-; 3,4-pentanediol, 2,3-dimethyl-; 2,3-hexahediol, 4methyl-; 2,3-hexanediol, 5-methyl-; 3,4-hexanediol, 2-methyl-; 1,2-butanediol, 2,3,3trimethyl-, 3,4-pentanediol, 2,3-dimethyl-, 1,3-propanediol, 2-(1,1-dimethylpropyl)-; 1,3-propanediol, 2-(1,2-dimethylpropyl)-; 1,3-propanediol, 2-(2,2-dimethylpropyl)-; 1,3-butanediol, 2-(1-methylpropyl)-; 1,3-butanediol, 2-ethyl-2,3-dimethyl-; 1,3-2-(2-methylpropyl)-; 1,3-butanediol, 2-methyl-2-isopropyl-; butanediol. 1.3-3-methyl-2-propyl-; butanediol. 3-methyl-2-isopropyl-: 1.3-butanediol. butanediol, 2,2-diethyl-; 1,4-butanediol, 2-methyl-2-propyl-; 1,4-butanediol, 2-(1methylpropyl)-; 1,4-butanediol, 2-ethyl-2,3-dimethyl-; 1,4-butanediol, 2-ethyl-3,3dimethyl-, 1,4-butanediol, 2-(2-methylpropyl)-; 1,4-pentanediol, 2,2,3-trimethyl-; 1,4-pentanediol, 2,3,3-trimethyl-; 1,5-pentanediol, 2,2,3-trimethyl-; 1,5-pentanediol, 2,3,3-trimethyl-; 1,3-pentanediol, 2-ethyl-2-methyl-; 1,4-pentanediol, 2-ethyl-2methyl-; 1,4-pentanediol, 2-ethyl-3-methyl-; 1,4-pentanediol, 2-ethyl-4-methyl-; 1,4pentanediol, 3-ethyl-2-methyl-; 1,4-pentanediol, 3-ethyl-3-methyl-; 1,5-pentanediol, 2-ethyl-2-methyl-; 1,5-pentanediol, 2-ethyl-4-methyl-; 2,4-pentanediol, 3-ethyl-2methyl-; 1,3-pentanediol, 2-isopropyl-; 1,3-pentanediol, 2-propyl-; 1,4-pentanediol, 2-isopropyl-; 1,4-pentanediol, 2-propyl-; 1,4-pentanediol, 3-isopropyl-; 2,4pentanediol, 3-propyl-; 1,3-hexanediol, 2,3-dimethyl-/ 1,3-hexanediol, 2,5-dimethyl-; 1,3-hexanediol, 3,4-dimethyl-; 1,3-hexanediol, 3,5/dimethyl-; 1,3-hexanediol, 4,5-1,4-hexanediol, 2,3-dimethyl-; 1,4dimethyl-; 1.4-hexanediol, 2.2-dimethyl-; 3.3-dimethyl-; 1,4-hexanediol, 3,4hexanediol, 2,4-dimethyl-; 1,4-hexanediol, dimethyl-; 1,4-hexanediol, 3,5-dimethyl-; 1.3-hexanediol, 4.4-dimethyl-; 1.4hexanediol, 4.5-dimethyl-; 1.5-hexanediol, 2.2-dimethyl-; 1.5-hexanediol, 3.4dimethyl-; 1,5-hexanediol, 3,5-dimethyl-; 1.5-hexanediol, 4.5-dimethyl-, 1.6hexanediol, 2,3-dimethyl-, 1,6-hexanediol,/2,4-dimethyl-; 1,6-hexanediol, 3,3dimethyl-; 2,4-hexanediol, 4,5-dimethyl-/ 2.5-hexanediol, 2,3-dimethyl-; 2,5hexanediol, 2,4-dimethyl-; 2,5-hexanediol, 3,3-dimethyl-; 2,6-hexanediol, 3,3dimethyl-, 1,3-hexanediol, 4-ethyl-, 2,4-hexanediol, 3-ethyl-, 2,5-hexanediol, 3-ethyl-1.3-heptanediol, 4-methyl-, 1,3-heptanediol, 5-methyl-, 1,3-heptanediol, 6-methyl-, 1,5-heptanediol, 3-methyl-; 1,5-heptanediol, 4-methyl-; 1,6-heptanediol, 3-methyl-; 1,6-heptanediol, 5-methyl-; 2,4-heptanediol, 5-methyl-; 2,5-heptanediol, 3-methyl-; 3.5-heptanediol, 2-methyl-; 2,6-octanediol; 2,4-hexanediol, 3,3,4-trimethyl-; 2,4hexanediol, 3,5,5-trimethyl-; 2,4-hexanediol, 4,5,5-trimethyl-; 2,5-hexanediol, 3,3,4-trimethyl-; 2,5-hexanediol, 3,3,5-trimethyl-;

- ether solvent selected from the group consisting of: 1,2-propanediol, 3-(2pentyloxy)-, 1,2-propanediol, 3-(3-pentyloxy)-, 1,2-propanediol, /3-(2-methyl-1butyloxy)-; 1,2-propanediol, 3-(iso-amyloxy)-; 1,2-propanediol, / 3-(3-methyl-2butyloxy)-; 1,2-propanediol, 3-(cyclohexyloxy)-; 1,2-propanediol, \( \beta \)-(1-cyclohex-1enyloxy)-; 1,3-propanediol, 2-(pentyloxy)-; 1,3-propanediol, 2-(2/pentyloxy)-; 1,3propanediol, 2-(3-pentyloxy)-, 1,3-propanediol, 2-(2-methyl-1-butyloxy)-, 1,3propanediol, 2-(iso-amyloxy)-, 1,3-propanediol, 2-(3-methyl-2-butyloxy)-, 1,3propanediol, 2-(cyclohexyloxy)-; 1,3-propanediol, 2-(1-cyclohex-1-enyloxy)-; 1,2propanediol. 3-(butyloxy)-, triethoxylated; 1,2-propanediol, 3-(butyloxy)-. tetraethoxylated; 1,2-propanediol, 3-(butyloxy)-, pentaethoxylated; 1,2-propanediol, 3-(butyloxy)-, hexaethoxylated; 1,2-propanediol, 3-(butyloxy)-, heptaethoxylated; 1,2-propanediol, 3-(butyloxy)-, octaethoxylated; 1,2-propanediol, 3-(butyloxy)-, nonaethoxylated; 1,2-propanediol, 3-(butyloxy)-, monopropoxylated; propanediol, 3-(butyloxy)-, dibutyleneoxylated; and 1,2-propanediol, 3-(butyloxy)-, tributyleneoxylated; bis(2-hydroxybutyl)ether; and bis(2-hydroxycyclopentyl)ether;
- C. compounds which are homologs, or analogs, of the following compounds in which each homolog, or analog, contains at least one additional CH<sub>2</sub> group and the total number of hydrogen atoms is kept the same by inserting one double bond for each additional CH<sub>2</sub> group:
- I. n-propanol;
- II. 2-butanol and/or 2-methyl-2-propanol;
- III. 2,3-butanediol, 2,3-dimethyl-; 1,2-butanediol, 2,3-dimethyl-; 1,2-butanediol, 3,3-dimethyl-; 2,3-pentanediol, 2-methyl-; 2,3-pentanediol, 3-methyl-; 2,3-pentanediol, 4-methyl-; 2,3-hexanediol; 3,4-hexanediol; 1,2-butanediol, 2-ethyl-, 1,2-pentanediol, 2-methyl-; 1,2-pentanediol, 3-methyl-; 1,2-pentanediol, 4-methyl-, and/or 1,2-hexanediol;
- IV. 1,3-propanediol, 2-butyl-; 1,3-propanediol, 2,2-diethyl-; 1,3-propanediol, 2-(1-methylpropyl)-; 1,3-propanediol, 2-(2-methylpropyl)-; 1,3-propanediol, 2-methyl-2-propyl-; 1,2-butanediol, 2,3,3-trimethyl-; 1,4-butanediol, 2-ethyl-2-methyl-; 1,4-butanediol, 2-ethyl-3-methyl-; 1,4-butanediol, 2-propyl-; 1,4-butanediol, 2-isopropyl-; 1,5-pentanediol, 2,2-dimethyl-; 1,5-pentanediol, 2,3-dimethyl-; 1,5-pentanediol, 2,4-dimethyl-; 2,3-pentanediol, 2,3-dimethyl-; 2,3-pentanediol, 2,4-dimethyl-; 2,3-pentanediol, 3,4-dimethyl-; 2,3-pentanediol, 4,4-dimethyl-; 3,4-pentanediol, 2,3-dimethyl-; 1,5-pentanediol, 2-ethyl-; 1,6-hexanediol, 2-methyl-; 1,6-hexanediol, 3-methyl-; 2,3-hexanediol, 3-methyl-; 3-methyl-; 3-methyl-; 3-methyl-; 3-methyl-; 3-meth

methyl-; 2,3-hexanediol, 4-methyl-; 2,3-hexanediol, 5-methyl-; 3,4-hexanediol, 2, methyl-; 3,4-hexanediol, 3-methyl-; 1,3-heptanediol; 1,4-; heptanediol; 1,5-heptanediol; and\or 1,6-heptanediol;

V. 1,3-propanediol, 2-(2-methylbutyl)-; 1,3-propanediol, 2-(1,1-dimethylpfopyl)-1,3-propanediol, 2-(1,2-dimethylpropyl)-; 1,3-propanediol, 2-(1-ethylpropyl)-; 1,3propanediol, 2-(1-methylbutyl)-; 1,3-propanediol, 2-(2,2-dimethylpropyl)-; propanediol, 2-(3-methylbutyl)-; 1,3-propanediol, 2-butyl-2-methyl-; 1.3propanediol, 2-ethyl-2-isopropyl-; 1,3-propanediol, 2-ethyl-2-propyl-: 1,3propanediol, 2-methyl-2-(1-methylpropyl)-; 1.3-propanediol. 2-methyl-2-(2methylpropyl)-; 1,3-propanediol, 2-tertiary-butyl-2-methyl-; 1,3-butanediol, 2,2diethyl-; 1,3-butanediol, 2-(1-methylpropyl)-; 1,3-butanediol, 2-butyl-; 1.3butanediol, 2-ethyl-2,3-dimethyl-; 1,3-butanediol, 2-(1/1-dimethylethyl)-; 1,3butanediol. 2-methyl-2-isopropyl-; 2-(2-methylpropyl)-; 1.3-butanediol. 1.3butanediol. 2-methyl-2-propyl-; 1,3-butanediol, 3-methyl-2-isopropyl-; 1,3butanediol, 3-methyl-2-propyl-; 1,4-butanediol, 2,2-diethyl-; 1,4-butanediol, 2methyl-2-propyl-; 1,4-butanediol, 2-(1-methylpropyl)-; 1,4-butanediol, 2-ethyl-2,3dimethyl-; 1,4-butanediol, 2-ethyl-3,3-dimethyl-; 1,4-butanediol. 2-(1,1dimethylethyl)-; 1,4-butanediol, 2-(2-methyloropyl)-; 1,4-butanediol, 2-methyl-3propyl-; 1,4-butanediol, 3-methyl-2-isopropyl-; 1,3-pentanediol, 2,2,3-trimethyl-; 1,3-pentanediol, 2,2,4-trimethyl-; 1,3-pentanediol, 2,3,4-trimethyl-; 1,3-pentanediol, 2,4,4-trimethyl-; 1,3-pentanediol, 3,4,4-trimethyl-; 1,4-pentanediol, 2,2,3-trimethyl-; 1,4-pentanediol, 2,2,4-trimethyl-; 1,4-pentanediol, 2,3,3-trimethyl-; 1,4-pentanediol, 3,3,4-trimethyl-; 1,5-pentanediol, 2,2,8-trimethyl-; 1,5-pentanediol, 2,2,4-trimethyl-; 1,5-pentanediol, 2,3,3-trimethyl-; 1,5-pentanediol, 2,3,4-trimethyl-; 2,4-pentanediol, 2,3,3-trimethyl-; 2,4-pentanediol, 2/3,4-trimethyl-; 1,3-pentanediol, 2-ethyl-2-methyl-; 1,3-pentanediol, 2-ethyl-3-methyl-; 1,3-pentanediol, 2-ethyl-4-methyl-; 1,3pentanediol, 3-ethyl-2-methyl-;/1,4-pentanediol, 2-ethyl-2-methyl-; 1,4-pentanediol, 2-ethyl-3-methyl-; 1,4-pentanediol, 2-ethyl-4-methyl-; 1,4-pentanediol, 3-ethyl-2methyl-; 1,4-pentanediol, 3-ethyl-3-methyl-; 1,5-pentanediol, 2-ethyl-2-methyl-; 1,5pentanediol, 2-ethyl-3-methyl-; 1,5-pentanediol, 2-ethyl-4-methyl-; 1,5-pentanediol, 3-ethyl-3-methyl-; 2,4-pentanediol, 3-ethyl-2-methyl-; 1,3-pentanediol, 2-isopropyl-; 1,3-pentanediol, 2-propyl-, 1,4-pentanediol, 2-isopropyl-, 1,4-pentanediol, 2-propyl-, 1.4-pentanediol, 3-isopropyl-, 1.5-pentanediol, 2-isopropyl-, 2,4-pentanediol, 3propyl-; 1,3-hexanediol, 2,2-dimethyl-; 1,3-hexanediol, 2,3-dimethyl-; hexanediol, 2,4-dimethyl-; 1,3-hexanediol, 2,5-dimethyl-; 1,3-hexanediol, 3,4dimethyl-; 1.3-hexanediol, 3.5-dimethyl-; 1.3-hexanediol, 4,5-dimethyl-; 1,4hexanediol, 2,2-dimethyl-; 1,4-hexanediol, 2,3-dimethyl-; 1,4-hexanediol, 2,4-

3.3-dimethyl-; 1.4dimethyl-; 1,4-hexanediol. 2,5-dimethyl-; 1.4-hexanediol, hexanediol, 3,4-dimethyl-; 1.3-hexanediol. 4.4-1,4-hexanediol. 3.5-dimethyl-: 5.5-dimethyl-: dimethyl-: 1.4-hexanediol. 4.5-dimethyl-: 1.4-hexanediol. 1.5-1,5-hexanediol, 2,4hexanediol, 2,2-dimethyl-; 1,5-hexanediol, 2.3-dimethyl-; 3,3-dimethyl-: dimethyl-; 1,5-hexanediol, 2,5-dimethyl-; 1,5-hexanediol, 1,5hexanediol, 3,4-dimethyl-; 1,5-hexanediol, 3,5-dimethyl-; 1,5-hexanediol, 4,5dimethyl-; 1,6-hexanediol, 2,2-dimethyl-; 1,6-hexanediol, 2,3-dimethyl-; 1,6hexanediol, 2,4-dimethyl-; 1,6-hexanediol, 1,6-hexanediol, 2.5-dimethyl-: 3,3dimethyl-; 1,6-hexanediol. 3.4-dimethyl-: 2,4-hexanediol, 2.3-dimethyl-: 2,4hexanediol, 2,4-dimethyl-: 2.4-hexanediol. 2.5-dimethyl-: 2,4-hexanediol, 3,3-2.4-hexanediol. dimethyl-; 2,4-hexanediol. 3.4-dimethyl-: 3.5-dimethyl-; 2,4hexanediol, 4,5-dimethyl-; 2,4-hexanediol, /5,5-dimethyl-: 2,5-hexanediol, 2,3dimethyl-; 2,5-hexanediol. 2,4-dimethyl-2.5-hexanediol 2.5-dimethyl-; 2,5hexanediol, 3,3-dimethyl-; 2,5-hexanediol, 3,4-dimethyl-; 2,6-hexanediol, 3,3dimethyl-; 1,3-hexanediol, 2-ethyl-; 1/3-hexanediol, 4-ethyl-; 1,4-hexanediol, 2-ethyl-; 1,4-hexanediol, 4-ethyl-; 1,5-hexanediol, 2-ethyl-; 2,4-hexanediol, 3-ethyl-; 2,4hexanediol, 4-ethyl-; 2,5-hexanediol, 3-ethyl-; 1,3-heptanediol, 2-methyl-; 1,3heptanediol, 3-methyl-, 1,3-heptanediol, 4-methyl-, 1,3-heptanediol, 5-methyl-, 1,3heptanediol, 6-methyl-; 1,4-heptanediol, 2-methyl-; 1,4-heptanediol, 3-methyl-; 1,4heptanediol, 4-methyl-/1,4-heptanediol, 5-methyl-, 1,4-heptanediol, 6-methyl-, 1,5heptanediol, 2-methyl-; 1,5-heptanediol, 3-methyl-; 1,5-heptanediol, 4-methyl-; 1,5heptanediol, 5-methyl-; 1,5-heptanediol, 6-methyl-; 1,6-heptanediol, 2-methyl-; 1,6heptanediol, 3-methyl-, 1,6-heptanediol, 4-methyl-, 1,6-heptanediol, 5-methyl-, 1,6heptanediol, 6-methyl-; 2,4-heptanediol, 2-methyl-; 2,4-heptanediol, 3-methyl-; 2,4heptanediol, 4-methyl-; 2,4-heptanediol, 5-methyl-; 2,4-heptanediol, 6-methyl-; 2,5heptanediol, 2-methyl-; 2,5-heptanediol, 3-methyl-; 2,5-heptanediol, 4-methyl-, 2,5heptanediol, 5-methyl-; 2,5-heptanediol, 6-methyl-; 2,6-heptanediol, 2-methyl-; 2,6heptanediol, 3-methyl-; 2,6-heptanediol, 4-methyl-; 3,4-heptanediol, 3-methyl-; 3,5heptanediol, 2-methyl-; 3,5-heptanediol, 3-methyl-; 3,5-heptanediol, 4-methyl-; 2,4octanediol; 2,5-octanediol; 2,6-octanediol; 2,7-octanediol; 3,5-octanediol; and/or 3.6-octanediol;

VI. 2,4-pentanediol, 2,3,3,4-tetramethyl-, 2,4-pentanediol, 3-tertiarybutyl-, 2,4-hexanediol, 2,5,5-trimethyl-; 2,4-hexanediol, 3,3,4-trimethyl-; 2,4-hexanediol, 3,5,5-trimethyl-; 2,4-hexanediol, 4,5,5-trimethyl-, 2,5-hexanediol, 3,3,4-trimethyl-; and/or 2,5-hexanediol, 3,3,5-trimethyl-;

VII. Alkoxylated derivatives of C3-g diols including:

- 1,2-propanediol (C3) 2(Me-E<sub>1-4</sub>); 1,2-propanediol (C3) PO<sub>4</sub>; 1,2 1. propanediol, 2-methyl- (C4) (Me-E<sub>4-10</sub>); 1,2-propanediol, 2-methyl- (C4) 2(Me-E<sub>1</sub>); 1,2-propanediol, 2-methyl- (C4) PO<sub>3</sub>; 1,2-propanediol, 2-methyl- (C4) BO<sub>1</sub>; 1,3-propanediol (C3) 2(Me-E<sub>6-8</sub>); 1,3-propanediol (C3) PO<sub>5-6</sub>; 1,3-propanediol, 2,2-diethyl- (C7) E<sub>1-7</sub>; 1,3-propanediol, 2,2-diethyl- (C7) PO<sub>1</sub>; 1,3-propanediol, 2,2-diethyl- (C7) n-BO<sub>1-2</sub>; 1,3-propanediol, 2,2-dimethyl- (C5) 2(Me  $\cancel{E}_{1-2}$ ); 1,3propanediol, 2,2-dimethyl- (C5) PO<sub>3-4</sub>; 1,3-propanediol, 2-(1-methyl-propyl)- (C7) E<sub>1-7</sub>; 1,3-propanediol, 2-(1-methylpropyl)- (C7) PO<sub>1</sub>; 1,3-propanediol, 2-(1methylpropyl)- (C7) n-BO<sub>1-2</sub>; 1,3-propanediol, 2-(2-methylpropyl)- (C7)  $E_{1-7}$ ; 1,3propanediol, 2-(2-methylpropyl)- (C7) PO<sub>1</sub>; 1,3-propanediol, /2-(2-methylpropyl)-(C7) n-BO<sub>1-2</sub>; 1,3-propanediol, 2-ethyl- (C5) (Me E<sub>6-10</sub>); 1,3-propanediol, 2-ethyl-(C5) 2(Me E<sub>1</sub>); 1,3-propanediol, 2-ethyl- (C5) PO<sub>3</sub>; 1,3-propanediol, 2-ethyl-2methyl- (C6) (Me E<sub>1-6</sub>); 1,3-propanediol, 2-ethyl-2-methyl- (C6) PO<sub>2</sub>; 1,3propanediol, 2-ethyl-2-methyl- (C6) BO1; 1,3-propanediol, 2-isopropyl- (C6) (Me E<sub>1-6</sub>); 1,3-propanediol, 2-isopropyl- (C6) PO<sub>2</sub>; 1,3-propanediol, 2-isopropyl- (C6) BO<sub>1</sub>; 1,3-propanediol, 2-methyl- (C4) 2(Me  $E_{2-5}$ );/1,3-propanediol, 2-methyl- (C4) PO<sub>4-5</sub>; 1,3-propanediol, 2-methyl- (C4) BO<sub>2</sub>; 1,3-propanediol, 2-methyl-2isopropyl- (C7) E<sub>2-9</sub>; 1,3-propanediol, 2-methyl-2-isopropyl- (C7) PO<sub>1</sub>; 1,3propanediol, 2-methyl-2-isopropyl- (C7) n-B $\phi_{1-3}$ ; 1,3-propanediol, 2-methyl-2propyl- (C7) E<sub>1-7</sub>; 1,3-propanediol, 2-methyl-2-propyl- (C7) PO<sub>1</sub>; 1,3-propanediol, 2-methyl-2-propyl- (C7) n-BO<sub>1-2</sub>; 1,3-propynediol, 2-propyl- (C6) (Me E<sub>1-4</sub>); 1,3propanediol, 2-propyl- (C6) PO<sub>2</sub>; 1,3-propynediol, 2-propyl- (C6) BO<sub>1</sub>;
- 2. 1,2-butanediol (C4) (Me/E<sub>2-8</sub>); 1,2-butanediol (C4) PO<sub>2-3</sub>; 1,2-butanediol (C4) BO<sub>1</sub>; 1,2-butanediol, 2,3-dimethyl- (C6) E<sub>1-6</sub>; 1,2-butanediol, 2,3-dimethyl- (C6) n-BO<sub>1-2</sub>; 1,2-butanediol, 2-ethyl- (C6) E<sub>1-3</sub>; 1,2-butanediol, 2-ethyl- (C6) n-BO<sub>1</sub>; 1,2-butanediol, 2-methyl- (C5) (Me E<sub>1-2</sub>); 1,2-butanediol, 2-methyl- (C5) PO<sub>1</sub>; 1,2-butanediol, 3,3-dimethyl- (C6) n-BO<sub>1-2</sub>; 1,2-butanediol, 3-methyl- (C5) (Me E<sub>1-2</sub>); 1,2-butanediol, 3-methyl- (C5) PO<sub>1</sub>; 1,3-butanediol (C4) 2(Me E<sub>3-6</sub>); 1,3-butanediol (C4) PO<sub>5</sub>; 1,3-butanediol (C4) BO<sub>2</sub>; 1,3-butanediol, 2,2,3-trimethyl- (C7) (Me E<sub>1-3</sub>); 1,3-butanediol, 2,2,3-trimethyl- (C7) PO<sub>1-2</sub>; 1,3-butanediol, 2,2-dimethyl- (C6) (Me E<sub>3-8</sub>); 1,3-butanediol, 2,2-dimethyl- (C6) PO<sub>3</sub>; 1,3-butanediol, 2,3-dimethyl- (C6) (Me E<sub>1-6</sub>); 1,3-butanediol, 2,3-dimethyl- (C6) PO<sub>2-3</sub>; 1,3-butanediol, 2-ethyl- (C6) BO<sub>1</sub>; 1,3-butanediol, 2-ethyl-2-methyl- (C7) (Me E<sub>1</sub>); 1,3-butanediol, 2-ethyl-2-methyl- (C7) PO<sub>1</sub>; 1,3-butanediol, 2-ethyl-2-methyl- (C7) n-BO<sub>2-4</sub>; 1,3-butanediol, 2-ethyl-3-methyl- (C7) (Me E<sub>1</sub>); 1,3-butanediol, 2-ethyl-3-methyl-3-methyl-3-methyl-3-methyl-3-methyl-3-methyl

2-ethyl-3-methyl- (C7) n-BO<sub>2-4</sub>; 1,3-butanediol, 2-isopropyl- (C7) (Me E<sub>1</sub>); 1,3butanediol, 2-isopropyl- (C7) PO1; 1,3-butanediol, 2-isopropyl- (C7) n-BO2\_4; 1,3butanediol, 2-methyl- (C5) 2(Me E<sub>1-3</sub>); 1,3-butanediol, 2-methyl- (C5)/PO<sub>4</sub>; 1,3butanediol, 2-propyl- (C7) E<sub>2-9</sub>; 1,3-butanediol, 2-propyl- (C7) PO<sub>1</sub>; 1,3-butanediol, 2-propyl- (C7) n-BO<sub>1-3</sub>; 1,3-butanediol, 3-methyl- (C5) 2(Me  $E_{1-3}$ );  $\frac{1}{2}$ ,3-butanediol, 3-methyl- (C5) PO<sub>4</sub>; 1,4-butanediol (C4) 2(Me E<sub>2-4</sub>); 1,4-butanediol (C4) PO<sub>4-5</sub>; 1,4-butanediol (C4) BO2; 1,4-butanediol, 2,2,3-trimethyl- (C7) E2-9; 1,4-butanediol, 2,2,3-trimethyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 2,2,3-trimethyl- (C7) n-BO<sub>1-3</sub>; 1,4butanediol, 2,2-dimethyl- (C6) (Me E<sub>1-6</sub>); 1,4-butanediol, 2,2-dimethyl- (C6) PO<sub>2</sub>; 1,4-butanediol, 2,2-dimethyl- (C6) BO<sub>1</sub>, 1,4-butanediol, 2,3-dimethyl- (C6) (Me E<sub>1</sub>. 6); 1,4-butanediol, 2,3-dimethyl- (C6) PO2; 1,4-butanediol, 2,3-dimethyl- (C6) BO1; 1,4-butanediol, 2-ethyl- (C6) (Me E<sub>1-4</sub>); 1,4-butanediol, 2-ethyl- (C6) PO<sub>2</sub>; 1,4butanediol, 2-ethyl- (C6) BO1; 1,4-butanediol, 2-ethyl-2-methyl- (C7) E1-7; 1,4butanediol, 2-ethyl-2-methyl- (C7) PO1; 1,4-butanediol, 2-ethyl-2-methyl- (C7) n-BO<sub>1-2</sub>, 1,4-butanediol, 2-ethyl-3-methyl- ( $\mathbb{C}^{7}$ ) E<sub>1-7</sub>, 1,4-butanediol, 2-ethyl-3methyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 2-ethyl-3/methyl- (C7) n-BO<sub>1-2</sub>; 1,4-butanediol, 2-isopropyl- (C7) E<sub>1-7</sub>, 1,4-butanediol, 2-isopropyl- (C7) PO<sub>1</sub>, 1,4-butanediol, 2isopropyl- (C7) n-BO<sub>1-2</sub>; 1,4-butanediol, 2-methyl- (C5) (Me E<sub>6-10</sub>); 1,4butanediol, 2-methyl- (C5) 2(Me E<sub>1</sub>); 1,4-butanediol, 2-methyl- (C5) PO<sub>3</sub>; 1,4butanediol, 2-methyl- (C5) BO1; 1,4-butanediol, 2-propyl- (C7) E1-5; 1,4butanediol, 2-propyl- (C7) n-BO<sub>1-2</sub>; 1,4-butanediol, 3-ethyl-1-methyl- (C7) E<sub>2-9</sub>; 1,4-butanediol, 3-ethyl-1-methyl- (C7) PO1; 1,4-butanediol, 3-ethyl-1-methyl- (C7) n-BO<sub>1-3</sub>, 2,3-butanediol (C4) (Me  $E_{6-10}$ ); 2,3-butanediol (C4) 2(Me  $E_{1}$ ); 2,3butanediol (C4) PO<sub>3-4</sub>; 2,3-butanediol (C4) BO<sub>1</sub>; 2,3-butanediol, 2,3-dimethyl- (C6) E<sub>3-9</sub>; 2,3-butanediol, 2,3-dimethyl- (C6) PO<sub>1</sub>; 2,3-butanediol, 2,3-dimethyl- (C6) n-BO<sub>1-3</sub>; 2,3-butanediol, 2-methyl- (C5) (Me E<sub>1-5</sub>); 2,3-butanediol, 2-methyl- (C5) PO<sub>2</sub>; 2,3-butanediol, 2-methyl- (C5) BO<sub>1</sub>;

3. 1,2-pentanediol (C5) E<sub>3-10</sub>; 1,2-pentanediol, (C5) PO<sub>1</sub>; 1,2-pentanediol, (C5) n-BO<sub>2-3</sub>; 1,2-pentanediol, 2-methyl (C6) E<sub>1-3</sub>; 1,2-pentanediol, 2-methyl (C6) BO<sub>1</sub>; 1,2-pentanediol, 3-methyl (C6) E<sub>1-3</sub>, 1,2-pentanediol, 3-methyl (C6) n-BO<sub>1</sub>; 1,2-pentanediol, 4-methyl (C6) E<sub>1-3</sub>; 1,2-pentanediol, 4-methyl (C6) n-BO<sub>1</sub>; 1,3-pentanediol (C5) 2(Me-E<sub>1-2</sub>); 1,3-pentanediol (C5) PO<sub>3-4</sub>; 1,3-pentanediol, 2,2-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 2,2-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3-pentanediol, 2,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 2,3-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3-pentanediol, 2,4-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 2,4-dimethyl- (C7)

dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3-pentanediol, 2-ethyl- (C7) E<sub>2-9</sub>; 1,3-pentanediol, 3 ethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 2-ethyl- (C7) n-BO<sub>1-3</sub>; 1,3-pentanediol, 2-methyl-(C6) 2(Me-E<sub>1-6</sub>); 1,3-pentanediol, 2-methyl- (C6) PO<sub>2-3</sub>; 1,3-pentanediol, 2methyl- (C6) BO<sub>1</sub>; 1,3-pentanediol, 3,4-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 3,4-dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 3,4-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3pentanediol, 3-methyl- (C6) (Me-E<sub>1-6</sub>); 1,3-pentanediol, 3-methyl- (C6) PO<sub>2-3</sub>; 1,3pentanediol, 3-methyl- (C6) BO<sub>1</sub>; 1,3-pentanediol, 4,4-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3pentanediol, 4,4-dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 4,4-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3-pentanediol, 4-methyl- (C6) (Me-E<sub>1-6</sub>); 1,3-pentanediol, 4-methyl- (C6) PO<sub>2-3</sub>; 1,3-pentanediol, 4-methyl- (C6) BO<sub>1</sub>; 1,4-pentanediol, (C5) 2(Me-E<sub>1-2</sub>); 1,4pentanediol (C5)  $PO_{3-4}$ ; 1,4-pentanediol, 2,2-dimethyl-/ (C7) (Me-E<sub>1</sub>); 1,4pentanediol, 2,2-dimethyl- (C7) PO1; 1,4-pentanediol, 2,2-dimethyl- (C7) n-BO2-4; 1,4-pentanediol, 2,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 2,3-dimethyl- (C7) n-BO<sub>2-4</sub>; /1,4-pentanediol, 2,4-dimethyl-(C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 2,4-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 2,4dimethyl- (C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 2/methyl- (C6) (Me-E<sub>1-6</sub>); 1,4pentanediol, 2-methyl- (C6) PO<sub>2-3</sub>; 1,4-pentanediol, 2-methyl- (C6) BO<sub>1</sub>; 1,4pentanediol, 3,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 3,3-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 3,3-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 3,4-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 3,4-dimethyl- (C/7) PO<sub>1</sub>; 1,4-pentanediol, 3,4-dimethyl-(C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 3-methyl/ (C6) 2(Me-E<sub>1-6</sub>); 1,4-pentanediol, 3methyl- (C6) PO<sub>2-3</sub>; 1,4-pentanediol, 3/-methyl- (C6) BO<sub>1</sub>; 1,4-pentanediol, 4methyl- (C6) 2(Me-E<sub>1-6</sub>); 1,4-pentanediol, 4-methyl- (C6) PO<sub>2-3</sub>; 1,4-pentanediol, 4-methyl- (C6) BO<sub>1</sub>; 1,5-pentanediol, (¢5) (Me-E<sub>4-10</sub>); 1,5-pentanediol (C5) 2(Me-E<sub>1</sub>); 1,5-pentanediol (C5) PO<sub>3</sub>; 1,5/pentanediol, 2,2-dimethyl- (C7) E<sub>1-7</sub>; 1,5pentanediol, 2,2-dimethyl- (C7) PO<sub>1</sub>/1,5-pentanediol, 2,2-dimethyl- (C7) n-BO<sub>1-2</sub>, 1,5-pentanediol, 2,3-dimethyl- (C7) E<sub>1-7</sub>; 1,5-pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 2,3-dimethyl- (C7) n-BO<sub>1-2</sub>; 1,5-pentanediol, 2,4-dimethyl- (C7) E<sub>1-7</sub>; 1,5-pentanediol, 2,4-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 2,4-dimethyl- (C7) n-BO $_{1-2}$ ; 1,5-pentanediol, 2-ethyl- (C7) E $_{1-5}$ ; 1,5-pentanediol, 2-ethyl- (C7) n-BO $_{1-2}$ 2; 1,5-pentanediol, 2-methyl- (Cb) (Me-E<sub>1-4</sub>); 1,5-pentanediol, 2-methyl- (C6) PO<sub>2</sub>; 1,5-pentanediol, 3,3-dimethyl- (C7) E<sub>1-7</sub>; 1,5-pentanediol, 3,3-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 3,3-dimethyl-/(C7) n-BO<sub>1-2</sub>; 1,5-pentanediol, 3-methyl- (C6) (Me-E<sub>1-4</sub>); 1,5-pentanediol, 3-methyl- (C6) PO<sub>2</sub>; 2,3-pentanediol, (C5) (Me-E<sub>1-3</sub>); 2,3pentanediol, (C5) PO<sub>2</sub>; 2,3-pentanediol, 2-methyl- (C6) E<sub>1-7</sub>; 2,3-pentanediol, 2methyl- (C6) PO<sub>1</sub>; 2,3-pentanediol, 2-methyl- (C6) n-BO<sub>1-2</sub>; 2,3-pentanediol, 3methyl- (C6) E<sub>1-7</sub>; 2,3-pentanediol, 3-methyl- (C6) PO<sub>1</sub>; 2,3-pentanediol, 3-methyl(C6) n-BO<sub>1-2</sub>; 2,3-pentanediol, 4-methyl- (C6)  $E_{1-7}$ ; 2,3-pentanediol, 4-methyl- (C6) PO<sub>1</sub>; 2,3-pentanediol, 4-methyl- (C6) n-BO<sub>1-2</sub>; 2,4-pentanediol, (C5) 2(Me-E<sub>1-4</sub>); 2,4-pentanediol (C5) PO<sub>4</sub>; 2,4-pentanediol, 2,3-dimethyl- (C7) (Me-E<sub>1-4</sub>); 2,4-pentanediol, 2,3-dimethyl- (C7) PO<sub>2</sub>; 2,4-pentanediol, 2,4-dimethyl- (C7) (Me-E<sub>1-4</sub>); 2,4-pentanediol, 2,4-dimethyl- (C7) PO<sub>2</sub>; 2,4-pentanediol, 2-methyl- (C7) (Me-E<sub>5-10</sub>); 2,4-pentanediol, 2-methyl- (C7) PO<sub>3</sub>; 2,4-pentanediol, 3,3-dimethyl- (C7) (Me-E<sub>1-4</sub>); 2,4-pentanediol, 3,3-dimethyl- (C7) PO<sub>2</sub>; 2,4-pentanediol, 3-methyl- (C6) (Me-E<sub>5-10</sub>); 2,4-pentanediol, 3-methyl- (C6) PO<sub>3</sub>;

1,3-hexanediol (C6) (Me- $E_{1-5}$ ); 1,3-hexanediol (C6) PO<sub>2</sub>; 1,3hexanediol (C6) BO<sub>1</sub>; 1,3-hexanediol, 2-methyl- (C7) E<sub>2-9</sub>; 1/3-hexanediol, 2methyl- (C7) PO<sub>1</sub>; 1,3-hexanediol, 2-methyl- (C7) n-BO<sub>1-3</sub>; /1,3-hexanediol, 2methyl- (C7) BO<sub>1</sub>; 1,3-hexanediol, 3-methyl- (C7) E<sub>2-9</sub>; 1,3-hexanediol, 3-methyl-(C7) PO<sub>1</sub>; 1,3-hexanediol, 3-methyl- (C7) n-BO<sub>1-3</sub>; 1,3-hexanediol, 4-methyl- (C7) E<sub>2-9</sub>; 1,3-hexanediol, 4-methyl- (C7) PO<sub>1</sub>; 1,3-hexanediol, 4-methyl- (C7) n-BO<sub>1-3</sub>; 1,3-hexanediol, 5-methyl- (C7) E2-9; 1,3-hexanediolo; 5 Infelterian (C7) PO1 hexanediol, 5-methyl- (C7) n-BO<sub>1-3</sub>; 1,4-hexanedidE(C6) (Me-E<sub>1-5</sub>); 1,4-hexanediol (C6) PO<sub>2</sub>; 1,4-hexanediol (C6) BO<sub>1</sub>; 1,4-hexanediol, 2-methyl- (C7) E<sub>2-9</sub>; 1,4hexanediol, 2-methyl- (C7) PO<sub>1</sub>; 1,4-hexanediol, 2-methyl- (C7) n-BO<sub>1-3</sub>; 1,4hexanediol, 3-methyl- (C7) E<sub>2-9</sub>; 1,4-hexanediol, 3-methyl- (C7) PO<sub>1</sub>; 1,4hexanediol, 3-methyl- (C7) n-BO<sub>1-3</sub>; 1,4-hexanediol, 4-methyl- (C7) E<sub>2-9</sub>; 1,4hexanediol, 4-methyl- (C7) PO<sub>1</sub>; 1,4-hexanediol, 4-methyl- (C7) n-BO<sub>1-3</sub>; 1,4hexanediol, 5-methyl- (C7)  $E_{2-9}$ ;  $\Lambda$ ,4-hexanediol, 5-methyl- (C7)  $PO_1$ ; 1,4hexanediol, 5-methyl- (C7) n-BO<sub>1-3</sub>, 1,5-hexanediol (C6) (Me-E<sub>1-5</sub>); 1,5-hexanediol (C6) PO<sub>2</sub>; 1,5-hexanediol (C6)/BO<sub>1</sub>; 1,5-hexanediol, 2-methyl- (C7)  $E_{2-9}$ ; 1,5hexanediol, 2-methyl- (C7) PO<sub>1</sub>; 1,5-hexanediol, 2-methyl- (C7) n-BO<sub>1-3</sub>; 1,5hexanediol, 3-methyl- (C7)  $E_{2-9}$ ; 1,5-hexanediol, 3-methyl- (C7)  $PO_1$ ; 1,5hexanediol, 3-methyl- (C7) n-BO<sub>1-3</sub>; 1,5-hexanediol, 4-methyl- (C7)  $E_{2-9}$ ; 1,5hexanediol, 4-methyl-/(C7) PO<sub>1</sub>; 1,5-hexanediol, 4-methyl- (C7) n-BO<sub>1-3</sub>; 1,5hexanediol, 5-methyl- (C7) E<sub>2-9</sub>; 1,5-hexanediol, 5-methyl- (C7) PO<sub>1</sub>; 1,5hexanediol, 5-methyl- (C7) n-BO<sub>1-3</sub>, 1,6-hexanediol (C6) (Me-E<sub>1-2</sub>), 1,6-hexanediol (C6) PO<sub>1-2</sub>; 1,6-hexanediol (C6) n-BO<sub>4</sub>; 1,6-hexanediol, 2-methyl- (C7) E<sub>1-5</sub>; 1,6hexanediol, 2-methyl- (C7) n-BO<sub>1-2</sub>, 1,6-hexanediol, 3-methyl- (C7) E<sub>1-5</sub>, 1,6hexanediol, 3-methyl- (C7) n-BO<sub>1-2</sub>; 2,3-hexanediol (C6) E<sub>1-5</sub>; 2,3-hexanediol (C6) n-BO<sub>1</sub>, 2,3-hexanediol (C6) BO<sub>1</sub>, 2,4-hexanediol (C6) (Me-E<sub>3-8</sub>), 2,4-hexanediol (C6) PO<sub>3</sub>, 2,4-hexanediol, 2-methyl- (C7) (Me-E<sub>1-2</sub>), 2,4-hexanediol 2-methyl- (C7)  $PO_{1-2}$ ; 2,4-hexanediol, 3-methyl- (C7) (Me- $E_{1-2}$ ); 2,4-hexanediol 3-methyl- (C7)

 $PO_{1-2}$ ; 2,4-hexanediol, 4-methyl- (C7) (Me- $E_{1-2}$ ); 2,4-hexanediol 4-methyl- (C7)

- PO<sub>1-2</sub>; 2,4-hexanediol, 5-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 5-methyl- (C7) PO<sub>1-2</sub>; 2,5-hexanediol (C6) (Me-E<sub>3-8</sub>); 2,5-hexanediol (C6) PO<sub>3</sub>; 2,5-hexanediol, 2-methyl- (C7) (Me-E<sub>1-2</sub>); 2,5-hexanediol 2-methyl- (C7) PO<sub>1-2</sub>; 2,5-hexanediol, 3-methyl- (C7) (Me-E<sub>1-2</sub>); 2,5-hexanediol 3-methyl- (C7) PO<sub>1-2</sub>; 3,4-hexanediol (C6) EO<sub>1-5</sub>; 3,4-hexanediol (C6) n-BO<sub>1</sub>; 3,4-hexanediol (C6) BO<sub>1</sub>:
- 5. 1,3-heptanediol (C7) E<sub>1-7</sub>; 1,3-heptanediol (C7) PO<sub>1</sub>; 1,3-heptanediol (C7) n-BO<sub>1-2</sub>; 1,4-heptanediol (C7) E<sub>1-7</sub>; 1,4-heptanediol (C7) PO<sub>1</sub>; 1,4-heptanediol (C7) n-BO<sub>1-2</sub>; 1,5-heptanediol (C7) E<sub>1-7</sub>; 1,5-heptanediol (C7) PO<sub>1</sub>; 1,5-heptanediol (C7) n-BO<sub>1-2</sub>; 1,6-heptanediol (C7) E<sub>1-7</sub>; 1,6-heptanediol (C7) PO<sub>1</sub>; 1,6-heptanediol (C7) n-BO<sub>1-2</sub>; 1,7-heptanediol (C7) E<sub>1-2</sub>; 1,7-heptanediol (C7) n-BO<sub>1</sub>; 2,4-heptanediol (C7) E<sub>3-10</sub>; 2,4-heptanediol (C7) (Me-E<sub>1</sub>); 2,4-heptanediol (C7) n-BO<sub>3</sub>; 2,5-heptanediol (C7) (Me-E<sub>1</sub>); 2,5-heptanediol (C7) PO<sub>1</sub>; 2,5-heptanediol (C7) n-BO<sub>3</sub>; 2,6-heptanediol (C7) E<sub>3-10</sub>; 2,6-heptanediol (C7) n-BO<sub>3</sub>; 2,6-heptanediol (C7) n-BO<sub>3</sub>; 3,5-heptanediol (C7) n-BO<sub>3</sub>; 3,5-heptanediol (C7) n-BO<sub>3</sub>; 3,5-heptanediol (C7) n-BO<sub>3</sub>;
- 1,3-butanediol, 3-methyl-2-isopropyl- (C8) PO<sub>1</sub>; 2,4-pentanediol, 2,3,3-trimethyl- (C8) PO<sub>1</sub>; 1,3-butanediol, 2,2-diethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 2,3-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 2,4-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 2,5-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 3,3-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 3,4-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 3,5-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 4,5-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 5,5-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 2,3-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 2,4/dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 2,5-dimethyl- (C8)  $E_{2-5}$ ; 2,5-hexanediol,  $3\sqrt{3}$ -dimethyl- (C8)  $E_{2-5}$ ; 2,5-hexanediol, 3,4-dimethyl- (C8) E<sub>2-5</sub>; 3,5-heptanediol,/3-methyl- (C8) E<sub>2-5</sub>; 1,3-butanediol, 2,2diethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,3-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,4-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,5-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4hexanediol, 3,3-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 3,4-dimethyl- (C8) n-BO<sub>1-</sub> 2; 2,4-hexanediol, 3,5-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 4,5-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 5,5-dimethyl-, n-BO<sub>1-2</sub>; 2,5-hexanediol, 2,3-dimethyl-(C8) n-BO<sub>1-2</sub>; 2,5-hexanediol, 2,4-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,5-hexanediol, 2,5dimethyl- (C8) n-BO<sub>1-2</sub>; 2,5-hexanediol, 3,3-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,5hexanediol, 3,4-dimethyl- (C8) n-BO<sub>1-2</sub>; 3,5-heptanediol, 3-methyl- (C8) n-BO<sub>1-2</sub>; 1,3-propanediol, 2-(1,2-dimethylpropyl)- (C8) n-BO<sub>1</sub>; 1,3-butanediol, 2-ethyl-2,3dimethyl- (C8) n-BO<sub>1</sub>; 1,3-butanediol, 2-methyl-2-isopropyl- (C8) n-BO<sub>1</sub>; 1,4butanediol, 3-methyl-2-isopropyl- (C8) n-BO1; 1,3-pentanediol, 2,2,3-trimethyl-(C8) n-BO<sub>1</sub>; 1,3-pentanediol, 2,2,4-trimethyl- (C8) n-BO<sub>1</sub>; 1,3-pentanediol, 2,4,4-

trimethyl- (C8) n-BO<sub>1</sub>, 1,3-pentanediol, 3,4,4-trimethyl- (C8) /n-BO<sub>1</sub>, 1,4pentanediol, 2,2,3-trimethyl- (C8) n-BO<sub>1</sub>, 1,4-pentanediol, 2,2,4-trimethyl- (C8) n-BO<sub>1</sub>, 1,4-pentanediol, 2,3,3-trimethyl- (C8) n-BO<sub>1</sub>; 1,4-pentanediol, 2,3,4-trimethyl-(C8) n-BO<sub>1</sub>, 1,4-pentanediol, 3,3,4-trimethyl- (C8) n-BO<sub>1</sub>, 2,4-pentanediol, 2,3,4trimethyl- (C8) n-BO<sub>1</sub>; 2,4-hexanediol, 4-ethyl- (C8) n-BO<sub>1</sub>, 2,4-heptanediol, 2methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 3-methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 4methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 5-methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 6methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 2-methyl- (C8) n/BO<sub>1</sub>; 2,5-heptanediol, 3methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 4-methyl- (C8) /n-BO<sub>1</sub>; 2,5-heptanediol, 5methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 6-methyl- (C8) n-BO<sub>1</sub>; 2,6-heptanediol, 2methyl- (C8) n-BO<sub>1</sub>, 2,6-heptanediol, 3-methyl- (C8) n-BO<sub>1</sub>; 2,6-heptanediol, 4methyl- (C8) n-BO<sub>1</sub>, 3,5-heptanediol, 2-methyl- (C8) n-BO<sub>1</sub>, 1,3-propanediol, 2-(1.2-dimethylpropyl)- (C8) E<sub>1-3</sub>; 1.3-butanedio/, 2-ethyl-2,3-dimethyl- (C8) E<sub>1-3</sub>. 1,3-butanediol, 2-methyl-2-isopropyl- (C8)  $/E_{1-3}$ ; 1,4-butanediol, 3-methyl-2isopropyl- (C8)  $E_{1-3}$ ; 1,3-pentanediol, 2,2,3/trimethyl- (C8)  $E_{1-3}$ ; 1,3-pentanediol, 2,2,4-trimethyl- (C8)  $E_{1-3}$ ; 1,3-pentanediol, 2,4,4-trimethyl- (C8)  $E_{1-3}$ ; 1,3pentanediol, 3,4,4-trimethyl- (C8) E<sub>1-3</sub>; 1,4-pentanediol, 2,2,3-trimethyl- (C8) E<sub>1-3</sub>; 1,4-pentanediol, 2,2,4-trimethyl- (C8)/ $E_{1-3}$ ; 1,4-pentanediol, 2,3,3-trimethyl- (C8) E<sub>1-3</sub>; 1,4-pentanediol, 2,3,4-trimethyl- (C8) E<sub>1-3</sub>; 1,4-pentanediol, 3,3,4-trimethyl-(C8)  $E_{1-3}$ , 2,4-pentanediol, 2,3,4-trimethyl- (C8)  $E_{1-3}$ , 2,4-hexanediol, 4-ethyl- (C8)  $E_{1-3}$ ; 2.4-heptanediol, 2-methyl/(C8)  $E_{1-3}$ ; 2.4-heptanediol, 3-methyl-(C8)  $E_{1-3}$ . 2,4-heptanediol, 4-methyl- (C8) E<sub>1-3</sub>; 2,4-heptanediol, 5-methyl- (C8) E<sub>1-3</sub>; 2,4heptanediol, 6-methyl- (C8) E<sub>1-3</sub>, 2,5-heptanediol, 2-methyl- (C8) E<sub>1-3</sub>, 2,5heptanediol, 3-methyl- (C8)  $E_{1-3}$ ; 2,5-heptanediol, 4-methyl- (C8)  $E_{1-3}$ , 2,5heptanediol, 5-methyl-/(C8)  $E_{1-3}$ ; 2,5-heptanediol, 6-methyl- (C8)  $E_{1-3}$ , 2,6heptanediol, 2-methyl- (C8) E<sub>1-3</sub>; 2.6-heptanediol, 3-methyl- (C8) E<sub>1-3</sub>, 2.6heptanediol, 4-methyl- (C8) E<sub>1-3</sub>; and/or 3,5-heptanediol, 2-methyl- (C8) E<sub>1-3</sub>;

## 7. mixtures thereof; and

VIII. aromatic diols including: 1-phenyl-1,2-ethanediol; 1-phenyl-1,2-propanediol, 2-phenyl-1,2-propanediol; 3-phenyl-1,2-propanediol; 1-(3-methylphenyl)-1,3-propanediol; 1-(4-methylphenyl)-1,3-propanediol; 2-methyl-1-phenyl-1,3-propanediol; 1-phenyl-1,3-butanediol; 1-phenyl-1,4-butanediol; 3-phenyl-1,3-butanediol; 1-phenyl-1,4-butanediol; and/or 1-phenyl-2,3-butanediol; and mixtures thereof; and

DX. mixtures thereof;

with the exception of the following specific compounds:

3,7-Octadiene-2,5-diol. 2,7-dimethyl-: 4,6-Octadiene-1,2-diol. 3,5-dimethyl-: 4,6-Octadiene-1,2-diol, 3,5-dimethyl-, 4,6-Octadiene-1,2-diol, 3,5-dimethyl-, 4,6-Octadiene-1,2-diol, 3,5-dimethyl-; 4,6-Octadiene-1,2-diol, 3,5-dimethyl-; 1-Hexene-3,4-diol, 5,5-dimethyl-; 6-Heptene-1,4-diol, 4-methyl-; 4-Octene-3,6-diol; 4-Øctene-3,6-diol; 3-Octene-1,2-diol; 3-Nonene-2,5-diol; 7-Nonene-4,5-diol; 7-Nonene-4,5diol; 6-Nonene-2,3-diol; 6-Heptene-2,4-diol, 5-methyl-; 6-Octene-1,2-diol, 7-methyl-3-methylene-, 2,7-Octadiene-1,6-diol, 2,6-dimethyl-; 1.3-Propanediol. methylenepentyl)-; 3-Heptene-2,6-diol, 2,6-dimethyl-; 3-Heptene-2,6-diol, 2,6dimethyl-; 5-Hexene-2,4-diol, 3,5-dimethyl-; 4-Hexene-1,2-diol, 2,5-dimethyl-; 4-Hexene-1,2-diol, 2,5-dimethyl-; 7-Octene-1,6-diol; 2-Hexene-1,4-diol, 2,5-dimethyl-; 2-Hexene-1,4-diol, 2,5-dimethyl-; 1,4-Hexanediol, 5-methyl-2-methylene-; 4-Octene-2,3-diol; Nonene-1,4-diol; 6-Heptene-1,4-diol, 4-methyl-; 6-Octene-3,5-diol, 4methyl-, 2,6-Octadiene-1,8-diol, 2,6-dimethyl-; (8-Hydroxygeraniol); 1-Heptene-3,5-diol, 2,4-dimethyl- 2,4-Hexanediol, 5-methyl-3-methylene-; 2,4-Hexanediol, 5methyl-3-methylene-; 5-Hexene-2,4-diol, 3-ethenyl-2,5-dimethyl-; 5-Hexene-2,4-diol, 3-ethenyl-2,5-dimethyl-; 6-Heptene-2,4-diol, 5-methyl/; 4,9-Decadiene-1,8-diol; 5-Hexene-1,3-diol, 2,4-dimethyl-; 7-Octene-1,3-diol, 2-methyl-; 5-Heptene-3-d-1,2diol, 2,6-dimethyl-: 5-Heptene-3-d-1,2-diol, 2,6-dimethyl-: 4-Nonene-2,8-diol, 4-Nonene-2,8-diol; 5-Hexene-2,3-diol, 2,3-dimethyl, 2-Butene-1,4-diol, 2-butyl-, 2,4-Hexadiene-1,6-diol, 3-(1,1-dimethylethyl)-; 6-Octene-1,4-diol, 7-methyl-; 6-Heptene-1,4-diol, 5,6-dimethyl-; 6-Heptene-1,4-diol, \$,6-dimethyl-; 7-Octene-2,5-diol, 7methyl-; 7-Octene-2,5-diol, 7-methyl-; 4-Hexene-1,3-diol, 2,4-dimethyl-; 4-Octene-2,7-diol; 4-Octene-2,7-diol; 3-Heptene-1,2/diol, 5-methyl-; 3-Heptene-1,2-diol, 5methyl-; 3,7-Octadiene-2,6-diol, 2,6-dimethyl-; 8-Nonene-1,7-diol; 2,6-Octadiene-1,4-diol, 3,7-dimethyl- (Isorosiridol); 5/Hexene-1,4-diol, 2,4-dimethyl-; 1-Heptene-3,4-diol, 6-methyl-; 3-Heptene-1,5-diol, 4,6-dimethyl-; 3-Octene-1,5-diol, 4-methyl-, 3,9-Decadiene-1,2-diol; 7-Octene-2,3-diol, 2-methyl-; 7-Octene-2,3-diol, 2-methyl-, 6-Nonene-2,3-diol; 2,5-Hexanediol/3-methyl-4-methylene-; 6-Heptene-1,4-diol, 2methyl-; 6-Octene-1,5-diol; 1-Octene-3,4-diol; 7-Octene-1,6-diol, 5-methyl-; 7-Octene-1,6-diol, 5-methyl-; 1,3-Butanediol, 2-methyl-2-(1-methylethenyl)-, 1,3-Pentanediol, 2-ethenyl-4,4-dimethyl-; 3,5-Octanediol, 4-methylene-; 3,5-Octanediol, 4-methylene-; 6-Heptene-2,3/diol, 2-methyl-; 6-Heptene-2,3-diol, 2,6-dimethyl-; 6-Heptene-2.3-diol, 2-methyl-/7-Octene-1,3-diol, 4-methyl-; 1,3-Butanediol, 2-methyl-2-(1-methyl-2-propenyl)-; /5-Heptene-1,2-diol, 2,6-dimethyl-; 1-Nonene-3,4-diol; 5-Heptene-1,2-diol, 3-methyl-; 3,7-Octadiene-2,6-diol, 2,6-dimethyl-; 6-Heptene-1,3diol, 2,2-dimethyl-; 4-Nonene-1,3-diol; 1,4-Pentanediol, 3-methyl-2-(2-propenyl)-; 1-Nonene-3,4-diol; 8-Nonene-1,2-diol; 3-Octene-1,2-diol; 1,9-Decadiene-4,6-diol; 1,9Decadiene-4,6-diol; 5-Hexene-1,3-diol, 2,2-dimethyl-; 1,3-Propanediol, pentenyl)-; 1,3-Propanediol, 2-(3-methyl-1-butenyl)-; 1,3-Propanediol,/2-(3-methyl-1-butenyl)-; 8-Nonene-1,3-diol; 2,4-Octadiene-1,8-diol, 2,7-dimethyl-; 5-Heptene-1,2-diol, 6-methyl-; 3,9-Decadiene-1,2-diol; 3-Nonene-1,2-diol; 6-Nonene-1,2-diol; 4-Hexene-1,3-diol, 2,4-dimethyl-; 2,4-Octadiene-1,7-diol, 3,7-dimethyl-; 4-Hexene-2,3-diol, 3,4-dimethyl-, 4-Hexene-2,3-diol, 3,4-dimethyl-, 4-Hexene-2,3-diol, 3,4dimethyl-, 4-Hexene-2,3-diol, 3,4-dimethyl-, 5-Hexene-2,3-diol, 3,4-dimethyl-, 5-Hexene-2,3-diol, 3,4-dimethyl-; 5-Hexene-2,3-diol, 3,4-dimethyl-; 1,3-Butanediol, 2methyl-2-(2-propenyl)-; 6-Heptene-2,5-diol, 4,6-dimethyl-;/6-Heptene-1,5-diol, 6methyl-; 6-Heptene-2,5-diol, 4,6-dimethyl-; 1,5-Pentanediol, 2-(2-propenyl)-; 5-Hexene-2,3-diol, 3,5-dimethyl-; 5-Hexene-2,3-diol, 3,5-dimethyl-; Nonenediol; Octenediol; 5-Hexene-1,3-diol, 3,5-dimethyl-; 4-Nonene-1,8-diol; 4-Nonene-1,7diol; 4-Nonene-1,6-diol; 6-Nonene-1,4-diol; 2-Nonene-1,4-diol; 8-Nonene-2,5-diol; 5-Heptene-1,2-diol, 2-ethenyl-6-methyl-; 4-Hexene-2,3-diol, 2,5-dimethyl-; 5-Heptene-2,3-diol, 2,6-dimethyl-; 1-Heptene-3,5-diol, 2,6-dimethyl-; 1-Heptene-3,5diol, 2,6-dimethyl-; 7-Octene-1,3-diol, 7-methyl-; 1,3-Propanediol, 2-methyl-2-(3methyl-3-butenyl)-; 5-Heptene-1,2-diol, 2,6-dimethyl-; 5,7-Octadiene-2,3-diol, 2,6dimethyl-; 5,7-Octadiene-2,3-diol, 2,6-dimethyl-; 5-Hexene-1,2-diol, 2-ethyl-; 2,4-Nonadiene-4-d-1,7-diol, 6-methyl-, 2,4-Monadiene-1,6,7-d3-1,7-diol, 6-methyl-, 2,4-Nonadiene-1,7-diol, 6-methyl-; 7-Octene-2,3-diol, 2-methyl-6-methylene-; 1,3-Butanediol, 3-methyl-2-(4-pentenylidene)-; 1,3-Butanediol, 3-methyl-2-(4pentenylidene)-, 2-Hexene-1,4-diol, 5,5-dimethyl-, 2-Hexene-1,4-diol, 5,5-dimethyl-, 2-Nonene-1,4-diol; 2-Nonene-1,4-diol; 7-Octene-2,3-diol, 2-methyl-6-methylene-; 5-Octene-1,3-diol; 7-Octene/1,3-diol, 2-methyl-; 4-Heptene-1,3-diol, 2-methyl-; 4-Octene-2,3-d2-1,2-diol; A-Octene-2,3-d2-1,2-diol; 5-Heptene-1,2-diol, 3-methyl-; 5-Octene-1,2-diol; 3,7-Octadiene-1,6-diol, 2,6-dimethyl-; 5-Heptene-1,2-diol, 2,6dimethyl-; 1,7-Octadiene-4,5-diol, 4,5-dimethyl-; 1,7-Octadiene-4,5-diol, 4,5dimethyl-; 5-Heptene-1,3-diol, 2-methyl-; 5-Heptene-1,3-diol, 2-methyl-; 3-Hexene-1,6-diol, 3,4-dimethyl-; 3-Hexene-1,6-diol, 3,4-dimethyl-; 2,6-Octadiene-1-t-1,8-diol, 2,6-dimethyl-, 2,6-Octadiene-1-t-1,8-diol, 2,6-dimethyl-, 2,6-Octadiene-1-d-1,8-diol, 2,6-dimethyl-; 2,6-Octadiene-1-d-1-t-1,8-diol, 2,6-dimethyl-; 2,6-Octadiene-1-d-1-t-1,8-diol, 2,6-dimethyl-; 2,6-Octadiene-1-d-1,8-diol, 2,6-dimethyl-; 2-Heptene-1,5diol/6-methyl-; 2-Heptene-1,5-diol, 6-methyl-; 8,9-Decadiene-3,5-diol; 8,9-Decadiene-3,5-diol; 4,6-Nonadiene-1,3-diol, 8-methyl-; 3,5-Nonadiene-1,7-diol, 8methyl-; 5-Heptene-1,3-diol, 2,4-dimethyl-; 2-Nonene-1,9-diol; 2-Nonene-1,9-diol; 1,3-Butanediol, 2-ethyl-2-(2-propenyl)-; 3-Heptene-1,5-diol, 6-methyl-; 1,3-Pentanediol, 2-ethenyl-4-methyl-; 1,3-Pentanediol, 2-ethenyl-4-methyl-; 5-Hexene2,3-diol, 3,4-dimethyl-, 5-Hexene-2,3-diol, 2,3,4-trimethyl-, 4-Pentene-1,2-diol, 2,3,3-trimethyl-; 1,3-Propanediol, 2-(2-methyl-2-propenyl)-2-(2-propenyl)-; Propanediol, 2-(2-butenyl)-2-(2-propenyl)-; 5-Hexene-1,2-diol, 2-ethyl-;/1,4-Butanediol, 2-(4-methyl-3-pentenylidene)- (\beta-Acaridiol); 6-Heptene-1,3-diol, 2methyl-, 2,6-Octadiene-1,8-diol-2-13C, 2,6-dimethyl-, 1-Hexene-3,4-diol, 5,5dimethyl-, 1-Hexene-3,4-diol, 5,5-dimethyl-, 1-Nonene-3,4-diol, 8-Nonene-2,4-diol, 8-Nonene-2,4-diol; 7-Octene-1,2-diol, 2-methyl-; 1-Nonene-3,5-diol; /2,7-Octadiene-1,6-diol, 2,6-dimethyl-, 7-Octene-1,2-diol, 7-Octene-1,2-diol, 2,5-Octadiene-1,7diol. 3,7-dimethyl-; 1,3-Propanediol, 2-(2,2-dimethylpropylidene)-; 6-Octene-1,2diol, 7-methyl-3-methylene-; 2,8-Decadiene-1,10-diol; 6-Octene-1,5-diol, 7-methyl-; 1,3-Butanediol, 2-(1-ethyl-1-propenyl)-; 4-Hexene-1,2-diol, A-ethyl-3-methyl-; 8-2-(3-methyl-2-butenyl)-3-methylene-; Nonene-1,3-diol; 1.4-Butanediol. Heptadiene-1,4-diol, 2,5,5-trimethyl-; 2,6-Heptadiene-1,4-diol, 2,5,5-trimethyl-; 8-Nonene-2,4-diol; 2,6-Heptanediol, 4-methylene-; 3-Hexene-3,4-diol, 2,5-dimethyl-; 4-Octene-4,5-diol; 5-Hexene-1,2-diol, 2,3-dimethyl-; 3-Hexene-1,6-diol, 2-ethenyl-2,5-dimethyl-; 3-Hexene-1,5-diol, 2,4-dimethyl-; 3-Hexene-1,5-diol, 2,4-dimethyl-; 3,7-Octadiene-2,6-diol, 2,6-dimethyl-, 3,6-Octadiene-1,2-diol, 3,7-dimethyl-, 7-Octene-2,3-diol, 6-methyl-; 7-Octene-2,3-diol, 6-methyl-; 7-Octene-2,3-diol, 6methyl-; 2,5-Octadiene-1,7-diol, 3,7-dimethyl-;/ 6-Octene-1,3-diol, 7-methyl-, Decadienediol; 6-Heptene-1,2-diol, 2,3-dimethyl-/4-Hexene-1,3-diol, 3,5-dimethyl-; 4-Pentene-1,3-diol, 2-(1,1-dimethylethyl)-, 4-Pentene-1,3-diol, 2-(1,1-dimethylethyl)-1-Heptene-3,5-diol, 6,6-dimethyl-; 1-Heptene-3,5-diol, 6,6-dimethyl-; 1,3-Hexanediol, 5-methyl-4-methylene-; 4-Octené-1,2-diol; 2,3-Heptanediol, 3-ethenyl-; 2,3-Heptanediol, 3-ethenyl-; 5-Hexene-1,3-diol, 2,4-dimethyl-; 5-Hexene-1,3-diol, 2,4-dimethyl-; 5-Hexene-1,3-diol, 2,4-dimethyl-; 2,6-Octadiene-1-t-1,8-diol, 3,7dimethyl-; 8-Nonene-2,4-diol; 8-Nonene-2,4-diol; 1,3-Octanediol, 2-methylene-; 8-Nonene-1,3-diol; 5-Heptene-1,4-diol, 3,6-dimethyl-; 5-Heptene-1,4-diol, 2,6dimethyl-; 4-Octene-2,3-diol; 4-Øctene-2,3-diol; 5,7-Octadiene-1,4-diol, 2,7dimethyl-; 7-Octene-1,3-diol, 7-methyl-; 2-Heptene-1,5-diol, 5-ethyl-; 2-Heptene-1,5-diol, 5-ethyl-; 1,3-Pentanediol, 2-ethenyl-3-ethyl-; 5-Heptene-2,4-diol, 2,3dimethyl-; 5-Heptene-2,4-diol,/2,3-dimethyl-; 8-Nonene-3,4-diol; 8-Nonene-3,4-diol, 5-Hexene-1,3-diol, 4,5-dimethyl-; 5-Hexene-1,3-diol, 4,5-dimethyl-; 4,6-Octadiene-2.3-diol, 3.7-dimethyl-; 1,3-Butanediol, 2,2-diallyl-; 1,9-Decadiene-3,8-diol; 2-Heptene-1,4-diol, 5,6-dimethyl-; 2-Heptene-1,4-diol, 5-methyl-; 2-Heptene-1,4-diol, 5,6-dimethyl-, 2-Heptene-1,4-diol, 5-methyl-; 2,8-Decadiene-5,6-diol; Octadiene-1,6-diol, 2,6-dimethyl- (8-Hydroxylinalool); 6-Heptene-1,2-diol, 2-methyl-; 5-Hexene-1,3-diol, 2,3-dimethyl-; 2,6-Octadiene-1,8-diol, 6-methyl-2-(methyl13C)-, 1,3-Propanediol, 2-(5-hexenyl)-, 8-Nonene-3,4-diol; 5-Hexene-1,3-diol, 3ethyl-, 7-Octene-3,4-diol, 6-Heptene-1,2-diol, 2-methyl-, 6-Heptene-2,4-diol, 4-(2propenyl)-, 2,6-Octadiene-1,4-diol, 3.7-dimethyl- (Rosiridol); 8-Nonene-3,4-diol; 6-Heptene-2,3-diol, 6-methyl-, 6-Heptene-2,3-diol, 2,6-dimethyl-, 4-Hexene-2,3-diol, 2,5-dimethyl-, 4,6-Octadiene-2,3-diol, 2,6-dimethyl-, 7-Octene-2,3-diol, 2-methyl-6methylene-, 7-Octene-2,3-diol, 6-methyl-, 4,6-Octadiene-2,3-diol, 2,6-dimethyl-, 1,4-Heptanediol, 6-methyl-5-methylene-, 2-Butene-1,4-diol, 2-(4-methyl-3-pentenyl)- (a-Acaridiol), 4-Octene-1,2-diol; 4-Octene-1,2-diol; 7-Octene-2,4-diol; 6-Heptene-2,4diol, 3-methyl-, 6-Heptene-2,4-diol, 3-methyl-, 3-Heptene-2,5-diol, 2,4-dimethyl-, 1,3-Butanediol, 2-(3-methyl-2-butenyl)-, 7-Octene-3,5-diol,/2-methyl-, 7-Octene-3,5-diol, 2-methyl-, 6-Heptene-2,4-diol, 5,5-dimethyl-; 6-Heptene-2,4-diol, 5,5dimethyl-, 1,3-Propanediol, 2-methyl-2-(2-methylallyl)-, 2-Heptene-1,6-diol, 6methyl-, 1,3-Butanediol, 2-allyl-3-methyl-, 2-Nonene-1,4-diol, 5-Hexene-2,3-diol, 4ethenyl-2,5-dimethyl-, 5-Hexene-2,3-diol, 4-ethenyl-2,5-dimethyl- 2-Nonene-1,4diol; 5-Heptene-1,3-diol, 3,6-dimethyl-; 1,5-Hexanediol, 2-(1-methylethenyl)-, and 1,3-Propanediol, 2-(1-pentenyl)-; and

D. mixtures of the above compounds; and

mixtures of 8-carbon-diol isomers primarily consisting of: 2,2,4-trimethyl-1,3-pentanediol, 2-ethyl-1,3-hexanediol, 2,2-dimethyl-1,3-hexanediol, 2-ethyl-4-methyl-1,3-pentanediol, 2-ethyl-3-methyl-1,3-pentanediol, 3,5-octanediol; 2,2-dimethyl-2,4-hexanediol, 2-methyl-3,5-heptanediol; and/or 3-methyl-3,5-heptanediol, the level of any individual 1,3-diol being less than about 90% of any mixture.

2 The material of Claim 1/ that is a compound selected from the group consisting of. 1,2-butanediol, 2,3,3-trimethyl-; 3,4-pentanediol, 2,3-dimethyl-, 2,3-hexanediol, 4methyl-, 2,3-hexanediol, 5-methyl-, 3,4-hexanediol, 2-methyl-, 3,4-pentanediol, 2,3dimethyl-, 1,3-propanediol, 2-(1,1-dimethylpropyl)-, 1,3-propanediol, 2-(1,2dimethylpropyl)-, 1,3-propanediol, 2-(2,2-dimethylpropyl)-, 1,3-butanediol, 2-(1methylpropyl)-, 1,3-butanediol, 2-ethyl-2,3-dimethyl-, 1,3-butanediol, 2-(2methylpropyl)-; 1,3-butanediol, 2-methyl-2-isopropyl-; 1,3-butanediol, 3-methyl-2isopropyl-; 1,3-butanediol, 3-methyl-2-propyl-, 1,4-butanediol, 2,2-diethyl-; 1,4butanediol, 2-methyl-2-propyl-; 1,4-butanediol, 2-(1-methylpropyl)-; 1,4-butanediol, 2-ethyl-2,3-dimethyl-; 1,4-butanediol, 2-ethyl-3,3-dimethyl-; 1,4-butanediol, 2-(2methylpropyl)-, 1,4-pentanediol, 2,2,3-trimethyl-, 1,4-pentanediol, 2,3,3-trimethyl-, 1,5-pentanediol, 2,2,3-trimethyl-, 1,5-pentanediol, 2,3,3-trimethyl-, 1,3-pentanediol, 2-ethyl-2-methyl-; 1,4-pentanediol, 2-ethyl-2-methyl-; 1,4-pentanediol, 2-ethyl-3methyl-, 1,4-pentanediol, 2-ethyl-4-methyl-, 1,4-pentanediol, 3-ethyl-2-methyl-, 1,4pentanediol, 3-ethyl-3-methyl-; 1,5-pentanediol, 2-ethyl-2-methyl-, 1,5-pentanediol, 2-ethyl-4-methyl-; 2,4-pentanediol, 3-ethyl-2-methyl-; 1,3-pentanediol, 2-isopropyl-, 1,3-pentanediol, 2-propyl-, 1,4-pentanediol, 2-isopropyl-, 1,4-pentanediol, 2-propyl-, 1,4-pentanediol, 3-isopropyl-, 2,4-pentanediol, 3-propyl-, 1,3-hexanediol, 2,3dimethyl-, 1,3-hexanediol, 2,5-dimethyl-, 1,3-hexanediol, 3.4-dimethyl-. 1,3hexanediol, 3,5-dimethyl-; 1,3-hexanediol, 4,5-dimethyl-, 2.2-1,4-hexanediol, dimethyl-; 1,4-hexanediol, 2,3-dimethyl-; 1,4-hexanediol, 2.4-dimethyl-1.4hexanediol, 3,3-dimethyl-, 1,4-hexanediol, 3,4-dimethyl-, 1,4-hexanediol, 3.5dimethyl-; 1,3-hexanediol, 4,4-dimethyl-; 1.4-hexanediol. 4.5-dimethyl-, 1.5hexanediol, 2,2-dimethyl-, 1,5-hexanediol, 3,4-dimethyl-, 1,5-hexanediol, 3,5dimethyl-; 1,5-hexanediol. 4,5-dimethyl-; 1.6-hexanediol. 2.3-dimethyl-, 1,6hexanediol, 2,4-dimethyl-; 1,6-hexanediol, 3,3-dimethyl-; 2,4-hexanediol, 4,5dimethyl-; 2,5-hexanediol, 2,3-dimethyl-, 2,5-hexanediol, 2,4-dimethyl-, 2,5hexanediol, 3,3-dimethyl-; 2,6-hexanediol, 3,3-dimethyl-; 1,3-hexanediol, 4-ethyl-; 2,4-hexanediol, 3-ethyl-; 2,5-hexanediol, 3-ethyl-; 1,3-heptanediol, 4-methyl-; 1,3heptanediol, 5-methyl-, 1,3-heptanediol, 6-methyl-, 1/5-heptanediol, 3-methyl-, 1,5heptanediol, 4-methyl-, 1,6-heptanedioi, 3-methyl-, 1,6-heptanediol, 5-methyl-, 2,4heptanediol, 5-methyl-; 2,5-heptanediol, 3-methyl-/3,5-heptanediol, 2-methyl-, 2,6octanediol; 2,4-hexanediol, 3,3,4-trimethyl-; 2,4/hexanediol, 3,5,5-trimethyl-, 2,4hexanediol, 4,5,5-trimethyl-; 2,5 nexanediol, 3,3/4-trimethyl-; 2,5-hexanediol, 3,3,5trimethyl-, 1,2-propanediol, 3-(butyloxy)-, /triethoxylated, 1,2-propanediol, 3-(butyloxy)-, tetraethoxylated, 1,2-propanediol, 3-(2-pentyloxy)-; 1,2-propanediol, 3-(3-pentyloxy)-; 1,2-propanediol, 3-(2-methyl-1-butyloxy)-; 1,2-propanediol, 3-(iso-3-(3-methyl-2-butyloxy)-. 1,2-propanediol. amyloxy)-: 1.2-propanediol, (cyclohexyloxy)-: 1.2-propanediol. 3-(1-gyclohex-1-enyloxy)-; 1,3-propanediol. 2-(pentyloxy)-; 1,3-propanediol, 2-(2-pentyloxy)-; 1,3-propanediol, 2-(3-pentyloxy)-, 1,3-propanediol, 2-(2-methyl-1-butyloxy)-, 1,3-propanediol, 2-(iso-amyloxy)-, 1,3propanediol, 2-(3-methyl-2-butyloxy): 1,3-propanediol, 2-(cyclohexyloxy)-, 1,3-2-(1-cyclohex-1-envloxy)-; 1,2-propanediol, 3-(butyloxy)-. propanediol pentaethoxylated, 1,2-propanediol,/3-(butyloxy)-, hexaethoxylated; 1,2-propanediol, 3-(butyloxy)-, heptaethoxylated; 1,2-propanediol, 3-(butyloxy)-, octaethoxylated, 1,2-propaneriol, 3-(butyloxy)-, nonaethoxylated; 1,2-propanediol, 3-(butyloxy)-, monoprope cylated; 1,2-propanediol, 3-(butyloxy)-, dibutyleneoxylated; and 1,2propanedial, 3-(butyloxy)-, tributyleneoxylated.

- 3. The material of Claim 1 that is an ether solvent selected from the group consisting of: 1,2-propanediol, 3-(2-pentyloxy)-; 1,2-propanediol, 3-(3-pentyloxy)-; 1,2-propanediol, 3-(2-methyl-1-butyloxy)-; 1,2-propanediol, 3-(iso-anyloxy)-; 1,2propanediol, 3-(3-methyl-2-butyloxy)-; 1,2-propanediol, 3-(cyclohexyloxy)-, 1,2propanediol, 3-(1-cyclohex-1-enyloxy)-; 1,3-propanediol, 2-(pentyloxy)-; 1,3propanediol, 2-(2-pentyloxy)-; 1,3-propanediol, 2-(3-pentyloxy)-;/1,3-propanediol, 2-(2-methyl-1-butyloxy)-; 1,3-propanediol, 2-(iso-amyloxy)-; 1,3-propanediol, 2-(3methyl-2-butyloxy)-; 1,3-propanediol, 2-(cyclohexyloxy)-; 1,3-propanediol, 2-(1cyclohex-1-enyloxy)-; 1,2-propanediol, 3-(butyloxy)-, / triethoxylated; propanediol, 3-(butyloxy)-, tetraethoxylated; 1.2-propanediol. 3-(butyloxy)-. pentaethoxylated; 1,2-propanediol, 3-(butyloxy)-, hexaethoxylated; 1,2-propanediol, 3-(butyloxy)-, heptaethoxylated; 1,2-propanediol, 3-(butyloxy)-, octaethoxylated; 1,2-propanediol, 3-(butyloxy)-, nonaethoxylated; 1,2-propanediol, 3-(butyloxy)-, monopropoxylated; 1,2-propanediol, 3-(butyloxy), dibutyleneoxylated; and 1,2propanediol, 3-(butyloxy)-, tributyleneoxylated; bis(2-hydroxybutyl)ether, and bis(2hydroxycyclopentyl)ether.
- 4. The material of Claim 1 that is a compound which is a homolog, or analog, of the following compounds in which each homolog, or analog, contains at least one additional CH<sub>2</sub> group and the total number of hydrogen atoms is kept the same by inserting one double bond for each additional CH<sub>2</sub> group:
- I. n-propanol;
- II. 2-butanol and/or 2-methyl-2-propanol;
- III. 2,3-butanediol, 2,3-dimethyl-; 1,2-butanediol, 2,3-dimethyl-; 1,2-butanediol, 3,3-dimethyl-; 2,3-pentanediol, 2-methyl-; 2,3-pentanediol, 3-methyl-; 2,3-pentanediol, 4-methyl-; 2,3-hexanediol; 3,4-hexanediol; 1,2-butanediol, 2-ethyl-, 1,2-pentanediol, 2-methyl-; 1,2-pentanediol, 4-methyl-, and/or 1,2-hexanediol;
- IV. 1,3-propanediol, 2-butyl-; 1,3-propanediol, 2,2-diethyl-; 1,3-propanediol, 2-(1-methylpropyl)-; 1,3-propanediol, 2-(2-methylpropyl)-; 1,3-propanediol, 2-methyl-2-propyl-; 1,2-butanediol, 2,3,3-trimethyl-; 1,4-butanediol, 2-ethyl-2-methyl-; 1,4-butanediol, 2-ethyl-3-methyl-; 1,4-butanediol, 2-propyl-; 1,4-butanediol, 2-isopropyl-; 1,5-pentanediol, 2,2-dimethyl-; 1,5-pentanediol, 2,3-dimethyl-; 1,5-pentanediol, 2,4-dimethyl-; 1,5-pentanediol, 2,3-dimethyl-; 2,3-pentanediol, 2,4-dimethyl-; 2,3-pentanediol, 3,4-dimethyl-; 2,3-pentanediol, 4,4-dimethyl-; 3,4-pentanediol, 2,3-dimethyl-; 1,5-pentanediol, 2-ethyl-; 1,6-hexanediol, 2-methyl-; 1,6-hexanediol, 3-methyl-; 2,3-hexanediol, 3-methyl-; 3-met

methyl-; 2,3-hexanediol, 4-methyl-; 2,3-hexanediol, 5-methyl-; 3,4-hexanediol, 2-methyl-; 3,4-hexanediol, 3-methyl-; 1,3-heptanediol; 1,4-; heptanediol; 1,5-heptanediol; and 1,6-heptanediol;

V. 1,3-propanediol, 2-(2-methylbutyl)-, 1,3-propanediol, 2-(1,1-dimethylpropyl)-1,3-propanediol, 2-(1,2-dimethylpropyl)-; 1,3-propanediol, 2-(1-ethylpropyl)-; 1,3propanediol, 2-(1-methylbutyl)-; 1,3-propanediol, 2-(2,2-dimethylpropyl)-; 1,3propanediol, 2-(3-methylbutyl)-; 1,3-propanediol, 2-butyl-2-methyl-; 1,3propanediol, 2-ethyl-2-isopropyl-; 1,3-propanediol, 2-ethyl-2-propyl-; 1.3propanediol, 2-methyl-2-(1-methylpropyl)-; 1,3-propanediol, 2-methyl-2-(2methylpropyl)-; 1,3-propanediol, 2-tertiary-butyl-2-methyl-; /1,3-butanediol, 2,2diethyl-; 1,3-butanediol, 2-(1-methylpropyl)-; 1,3-butanediol, 2-butyl-; 1,3butanediol. 2-ethyl-2,3-dimethyl-; 1,3-butanediol, 2-(1,1-dimethylethyl)-; 1,3butanediol. 2-(2-methylpropyl)-; 1,3-butanediol, 2-methyl-2-isopropyl-; 1,3butanediol, 2-methyl-2-propyl-; 1,3-butanediol.  $\beta$ -methyl-2-isopropyl-; = 1,3butanediol, 3-methyl-2-propyl-; 1,4-butanediol, 2,2-diethyl-; 1,4-butanediol, 2methyl-2-propyl-; 1,4-butanediol, 2-(1-methylpropyl)-; 1,4-butanediol, 2-ethyl-2,3-2-ethyl-3,3-dimethyl-: dimethyl-: 1.4-butanediol. 1.4-butanediol. 2-(1,1dimethylethyl)-, 1,4-butanediol, 2-(2-methylpropyl)-, 1,4-butanediol, 2-methyl-3propyl-, 1,4-butanediol, 3-methyl-2-isopropyl-, 1,3-pentanediol, 2,2,3-trimethyl-, 1,3-pentanediol, 2,2,4-trimethyl-; 1,3-pentanediol, 2,3,4-trimethyl-; 1,3-pentanediol, 2,4,4-trimethyl-; 1,3-pentanediol, 3,4,4-trimethyl-; 1,4-pentanediol, 2,2,3-trimethyl-; 1,4-pentanediol, 2,2,4-trimethyl-, 1,4-pentanediol, 2,3,3-trimethyl-, 1,4-pentanediol, 3,3,4-trimethyl-; 1,5-pentanediol, 2,2,3/trimethyl-; 1,5-pentanediol, 2,2,4-trimethyl-; 1.5-pentanediol, 2,3,3-trimethyl-; 1,5-pentanediol, 2,3,4-trimethyl-; 2,4-pentanediol, 2,3,3-trimethyl-; 2,4-pentanediol, 2,3,4-trimethyl-; 1,3-pentanediol, 2-ethyl-2-methyl-1,3-pentanediol, 2-ethyl-3-methyl-; 1,3-pentanediol, 2-ethyl-4-methyl-; 1,3pentanediol, 3-ethyl-2-methyl-; 1,4-pentanediol, 2-ethyl-2-methyl-; 1,4-pentanediol, 2-ethyl-3-methyl-; 1,4-pentanediol, 2-ethyl-4-methyl-; 1,4-pentanediol, 3-ethyl-2methyl-; 1,4-pentanediol, 3-ethyl-3-methyl-; 1,5-pentanediol, 2-ethyl-2-methyl-; 1,5pentanediol, 2-ethyl-3-methyl-; 1,5-pentanediol, 2-ethyl-4-methyl-; 1,5-pentanediol, 3-ethyl-3-methyl-, 2,4-pentanediol, 3-ethyl-2-methyl-, 1,3-pentanediol, 2-isopropyl-, 1,3-pentanediol, 2-propyl-, 1,4-pentanediol, 2-isopropyl-, 1,4-pentanediol, 2-propyl-, 1,4-pentanediol, 3-isopropyl-; 1,5-pentanediol, 2-isopropyl-; 2,4-pentanediol, 3propyl-; 1,3-hexanediol, 2,2-dimethyl-; 1.3-hexanediol, 2,3-dimethyl-; 1,3hexanediol, 2,4-dimethyl-; 1,3-hexanediol, 2,5-dimethyl-; 1,3-hexanediol, 3,4dimethyl-; 1,3-hexanediol, 3,5-dimethyl-; 1,3-hexanediol, 4,5-dimethyl-; 1,4hexanediol, 2,2-dimethyl-; 1,4-hexanediol, 2,3-dimethyl-; 1,4-hexanediol, 2,4dimethyl-; 1,4-hexanediol, 2,5-dimethyl-; 1,4-hexanediol, 3,3-dimethyl-; 1,4hexanediol. 3,4-dimethyl-; 1,4-hexanediol, 3,5-dimethyl-; 1,3-hexanediol. 4,4dimethyl-; 1.4-hexanediol, 4,5-dimethyl-; 1,4-hexanediol, 5,5-dimethyl-, 1,5hexanediol, 2,2-dimethyl-; 1,5-hexanediol, 2,3-dimethyl-; 1,5-hexanediol, 2,4dimethyl-; .,5-hexanediol, 2,5-dimethyl-; 1,5-hexanediol, 3,3-dimethyl-; 1.5hexanediol, 3,4-dimethyl-; 1,5-hexanediol, 3,5-dimethyl-; 1,5-hexanediol, 4.5dimethyl-; 1,6-hexanediol, 2,2-dimethyl-; 1,6-hexanediol, 2,3/dimethyl-; 1.6hexanediol, 2,4-dimethyl-; 1,6-hexanediol, 2,5-dimethyl-; 1.6-hexanediol, 3.3dimethyl-; 1,6-hexanediol. 3,4-dimethyl-; 2,4-hexanediol. 2.3-dimethyl-: 2.4hexanediol, 2,4-dimethyl-; 2,4-hexanediol, 2,5-dimethyl-; 2.4-hexanediol, 3.3dimethyl-; 2,4-hexanediol, 3,4-dimethyl-; 2,4-hexanediol/ 3,5-dimethyl-; 2,4hexanediol, 4,5-dimethyl-; 2,4-hexanediol, 5,5-dimethyl-2,5-hexanediol, 2,3dimethyl-; 2,5-hexanediol, 2,4-dimethyl-; 2,5-hexanediol, 2,5-dimethyl-; 2,5hexanediol, 3,3-dimethyl-; 2,5-hexanediol, 3,4-dimethyl-; 2,6-hexanediol, 3,3dimethyl-; 1,3-hexanediol, 2-ethyl-; 1,3-hexanediol, 4-ethyl-; 1,4-hexanediol, 2-ethyl-; 1,4-hexanediol, 4-ethyl-; 1,5-hexanediol, 2-ethyl-, 2,4-hexanediol, 3-ethyl-; 2,4hexanediol, 4-ethyl-; 2,5-hexanediol, 3-ethyl-; 1,3-heptanediol, 2-methyl-; 1,3heptanediol, 3-methyl-; 1,3-heptanediol, 4-methyl-; 1,3-heptanediol, 5-methyl-; 1,3heptanediol, 6-methyl-, 1,4-heptanediol, 2-methyl-, 1,4-heptanediol, 3-methyl-, 1,4heptanediol, 4-methyl-; 1,4-heptanediol, 5-methyl-; 1,4-heptanediol, 6-methyl-; 1,5heptanediol, 2-methyl-; 1,5-heptanediol, 3-methyl-; 1,5-heptanediol, 4-methyl-; 1,5heptanediol, 5-methyl-; 1,5-heptanediol/6-methyl-; 1,6-heptanediol, 2-methyl-; 1,6heptanediol, 3-methyl-; 1,6-heptanediol, 4-methyl-; 1,6-heptanediol, 5-methyl-; 1,6heptanediol, 6-methyl-; 2,4-heptanediol, 2-methyl-; 2,4-heptanediol, 3-methyl-; 2,4heptanediol, 4-methyl-; 2,4-heptanediol, 5-methyl-; 2,4-heptanediol, 6-methyl-; 2,5heptanediol, 2-methyl-; 2,5-heptanediol, 3-methyl-; 2,5-heptanediol, 4-methyl-; 2,5heptanediol, 5-methyl-; 2,5-heptanediol, 6-methyl-; 2,6-heptanediol, 2-methyl-; 2,6heptanediol, 3-methyl-; 2,6-heptanediol, 4-methyl-; 3,4-heptanediol, 3-methyl-, 3,5heptanediol. 2-methyl-, 3,5-heptanediol, 3-methyl-; 3,5-heptanediol, 4-methyl-, 2,4octanediol; 2,5-octanediol; 2,6-octanediol; 2,7-octanediol; 3,5-octanediol; and/or 3,6-octanediol;

VI. 2,4-pentanediol, 2,3,3,4-tetramethyl-; 2,4-pentanediol, 3-tertiarybutyl-; 2,4-hexanediol, 2,5,5-trimethyl-; 2,4-hexanediol, 3,3,4-trimethyl-; 2,4-hexanediol, 3,5,5-trimethyl-; 2,4-hexanediol, 4,5,5-trimethyl-; 2,5-hexanediol, 3,3,4-trimethyl-; and/or 2,5-hexanediol, 3,3,5-trimethyl-;

VIII. / Alkoxylated derivatives of C3-8 diols including:

1,2-propanediol (C3) 2(Me-E<sub>1-4</sub>), 1,2-propanediol (C3) PO<sub>4</sub>, 1,2propanediol, 2-methyl- (C4) (Me-E<sub>4-10</sub>); 1,2-propanediol, 2-methyl- (C4) 2(Me-E<sub>1</sub>); 1,2-propanediol, 2-methyl- (C4) PO<sub>3</sub>; 1,2-propanediol, 2-methyl- (C4) BO<sub>1</sub>, 1,3-propanediol (C3) 2(Me-E<sub>6-8</sub>), 1,3-propanediol (C3) PO<sub>5-6</sub>, 1,3-propanediol, 2,2-diethyl- (C7) E<sub>1-7</sub>; 1,3-propanediol, 2,2-diethyl- (C7) PO<sub>1</sub>; 1,3-propanediol, 2,2-diethyl- (C7) n-BO<sub>1-2</sub>; 1,3-propanediol, 2,2-dimethyl- (C5)  $2(Me E_{1-2})$ ; 1,3propanediol, 2,2-dimethyl- (C5) PO<sub>3-4</sub>; 1,3-propanediol, 2-(1-methylpropyl)- (C7) E<sub>1-7</sub>; 1,3-propanediol, 2-(1-methylpropyl)- (C7) PO<sub>1</sub>; 1,3-propanediol, 2-(1methylpropyl)- (C7) n-BO<sub>1-2</sub>; 1,3-propanediol, 2-(2-methylpropyl)- (C7)  $E_{1-7}$ ; 1,3propanediol, 2-(2-methylpropyl)- (C7) PO<sub>1</sub>; 1,3-propanediol, /2-(2-methylpropyl)-(C7) n-BO<sub>1-2</sub>; 1,3-propanediol, 2-ethyl- (C5) (Me E<sub>6-10</sub>); 1,3-propanediol, 2-ethyl-(C5) 2(Me E<sub>1</sub>); 1,3-propanediol, 2-ethyl- (C5) PO<sub>3</sub>; 1,3-propanediol, 2-ethyl-2methyl- (C6) (Me E<sub>1-6</sub>); 1,3-propanediol, 2-ethyl-2-methyl- (C6) PO<sub>2</sub>; 1,3propanediol, 2-ethyl-2-methyl- (C6) BO1; 1,3-propanediol, 2-isopropyl- (C6) (Me E<sub>1-6</sub>); 1,3-propanediol, 2-isopropyl- (C6) PO<sub>2</sub>; 1,3-propanediol, 2-isopropyl- (C6) BO<sub>1</sub>; 1,3-propanediol, 2-methyl- (C4) 2(Me E<sub>2-5</sub>); 1,3-propanediol, 2-methyl- (C4)  $PO_{4-5}$ ; 1,3-propanediol, 2-methyl- (C4)  $BO_2$ ; /1,3-propanediol, 2-methyl-2isopropyl- (C7) E<sub>2-9</sub>, 1,3-propanediol, 2-methy/-2-isopropyl- (C7) PO<sub>1</sub>, 1,3propanediol, 2-methyl-2-isopropyl- (C7)  $n-BO_1/3$ , 1,3-propanediol, 2-methyl-2propyl- (C7) E<sub>1-7</sub>; 1,3-propanediol, 2-methyl-2-propyl- (C7) PO<sub>1</sub>; 1,3-propanediol, 2-methyl-2-propyl- (C7) n-BO<sub>1-2</sub>; 1,3-propanediol, 2-propyl- (C6) (Me E<sub>1-4</sub>); 1,3propanediol, 2-propyl- (C6) PO<sub>2</sub>; 1,3-propanediol, 2-propyl- (C6) BO<sub>1</sub>;

2. 1,2-butanediol (C4) (Me E<sub>2-8</sub>); 1,2-butanediol (C4) PO<sub>2-3</sub>; 1,2-butanediol (C4) BO<sub>1</sub>; 1,2-butanediol, 2,3-dimethyl- (C6) E<sub>1-6</sub>; 1,2-butanediol, 2,3-dimethyl- (C6) n-BO<sub>1-2</sub>; 1,2-butanediol, 2-ethyl- (C5) (Me E<sub>1-2</sub>); 1,2-butanediol, 2-ethyl- (C5) PO<sub>1</sub>; 1,2-butanediol, 3,3-dimethyl- (C6) n-BO<sub>1-2</sub>; 1,2-butanediol, 3,3-dimethyl- (C5) (Me E<sub>1-2</sub>); 1,2-butanediol, 3,3-dimethyl- (C6) n-BO<sub>1-2</sub>; 1,2-butanediol, 3-methyl- (C5) (Me E<sub>1-2</sub>); 1,2-butanediol, 3-methyl- (C5) PO<sub>1</sub>; 1,3-butanediol (C4) 2(Me E<sub>3-6</sub>); 1,3-butanediol (C4) PO<sub>5</sub>; 1,3-butanediol (C4) BO<sub>2</sub>; 1,3-butanediol, 2,2,3-trimethyl- (C7) (Me E<sub>1-3</sub>); 1,3-butanediol, 2,2,3-trimethyl- (C7) PO<sub>1-2</sub>; 1,3-butanediol, 2,2-dimethyl- (C6) (Me E<sub>3-8</sub>); 1,3-butanediol, 2,2-dimethyl- (C6) PO<sub>3</sub>; 1,3-butanediol, 2,3-dimethyl- (C6) (Me E<sub>3-8</sub>); 1,3-butanediol, 2,3-dimethyl- (C6) PO<sub>2-3</sub>; 1,3-butanediol, 2-ethyl- (C6) BO<sub>1</sub>; 1,3-butanediol, 2-ethyl-2-methyl- (C7) (Me E<sub>1</sub>); 1,3-butanediol, 2-ethyl-2-methyl- (C7) PO<sub>1</sub>; 1,3-butanediol, 2-ethyl-2-methyl- (C7) n-BO<sub>2-4</sub>; 1,3-butanediol, 2-ethyl-3-methyl- (C7) (Me E<sub>1</sub>); 1,3-butanedi

A STATE OF THE STA  2-ethyl-3-methyl- (C7) n-BO<sub>2-4</sub>; 1,3-butanediol, 2-isopropyl- (C7) (Me  $E_1$ ), 1,3butanediol, 2-isopropyl- (C7) PO<sub>1</sub>; 1,3-butanediol, 2-isopropyl- (C7) n-BO<sub>2</sub>/<sub>4</sub>; 1,3butanediol, 2-methyl- (C5) 2(Me E<sub>1-3</sub>); 1,3-butanediol, 2-methyl- (C5) PO<sub>4</sub>; 1,3butanediol, 2-propyl- (C7) E2-9, 1,3-butanediol, 2-propyl- (C7) PO1; 1,3-butanediol, 2-propyl- (C7) n-BO<sub>1-3</sub>; 1,3-butanediol, 3-methyl- (C5) 2(Me E<sub>1-3</sub>); 1,3/butanediol, 3-methyl- (C5) PO<sub>4</sub>; 1,4-butanediol (C4) 2(Me E<sub>2-4</sub>); 1,4-butanediol (C4) PO<sub>4-5</sub>; 1,4-butanediol (C4) BO<sub>2</sub>; 1,4-butanediol, 2,2,3-trimethyl- (C7) E<sub>2-9</sub>; 1,4-butanediol, 2,2,3-trimethyl- (C7) PO<sub>1</sub>, 1,4-butanediol, 2,2,3-trimethyl- (C7) n-BO<sub>1-3</sub>, 1,4butanediol, 2,2-dimethyl- (C6) (Me E<sub>1-6</sub>); 1,4-butanediol, 2,2-dimethyl- (C6) PO<sub>2</sub>; 1,4-butanediol, 2,2-dimethyl- (C6) BO<sub>1</sub>; 1,4-butanediol, 2,3-dimethyl- (C6) (Me E<sub>1</sub>. 6); 1,4-butanediol, 2,3-dimethyl- (C6) PO2; 1,4-butanediol, 2,3-dimethyl- (C6) BO1; 1,4-butanediol, 2-ethyl- (C6) (Me E<sub>1-4</sub>); 1,4-butanediol, 2-ethyl- (C6) PO<sub>2</sub>; 1,4butanediol, 2-ethyl- (C6) BO<sub>1</sub>; 1,4-butanediol, 2-ethyl-2-methyl- (C7) E<sub>1-7</sub>; 1,4butanediol, 2-ethyl-2-methyl- (C7) PO1; 1,4-butanediol, 2-ethyl-2-methyl- (C7) n-BO<sub>1-2</sub>; 1,4-butanediol, 2-ethyl-3-methyl- (C7)  $E_{1-7}$ ; 1,4-butanediol, 2-ethyl-3methyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 2-ethyl-3-methyl- (C/7) n-BO<sub>1-2</sub>; 1,4-butanediol, 2-isopropyl- (C7)  $E_{1-7}$ ; 1,4-butanediol, 2-isopropyl-/(C7) PO<sub>1</sub>; 1,4-butanediol, 2isopropyl- (C7) n-BO<sub>1-2</sub>; 1,4-butanediol, 2-methyl- (C5) (Me E<sub>6-10</sub>); 1,4butanediol, 2-methyl- (C5) 2(Me E1); 1,4-butanediol, 2-methyl- (C5) PO3, 1,4butanediol, 2-methyl- (C5) BO<sub>1</sub>; 1,4-butanediol, 2-propyl- (C7) E<sub>1-5</sub>; 1,4butanediol, 2-propyl- (C7) n-BO<sub>1-2</sub>, 1,4-butanediol, 3-ethyl-1-methyl- (C7) E<sub>2-9</sub>, 1,4-butanediol, 3-ethyl-1-methyl- (C7) PO<sub>A</sub>; 1,4-butanediol, 3-ethyl-1-methyl- (C7) n-BO<sub>1-3</sub>; 2,3-butanediol (C4) (Me  $E_{6}/_{10}$ ); 2,3-butanediol (C4) 2(Me  $E_{1}$ ); 2,3butanediol (C4) PO<sub>3-4</sub>, 2,3-butanediol (C4) BO<sub>1</sub>; 2,3-butanediol, 2,3-dimethyl- (C6) E<sub>3-9</sub>, 2,3-butanediol, 2,3-dimethyl-(C6) PO<sub>1</sub>, 2,3-butanediol, 2,3-dimethyl- (C6) n-BO<sub>1-3</sub>; 2,3-butanediol, 2-methyl- (C5) (Me E<sub>1-5</sub>); 2,3-butanediol, 2-methyl- (C5) PO<sub>2</sub>; 2,3-butanediol, 2-methyl-(C5) BO<sub>1</sub>;

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1,2-pentanediol (C5) E<sub>3-10</sub>; 1,2-pentanediol, (C5) PO<sub>1</sub>; 1,2pentanediol, (C5) n-BO<sub>2-3</sub>; 1,2-pentanediol, 2-methyl (C6) E<sub>1-3</sub>; 1,2-pentanediol, 2methyl (C6) n-BO<sub>1</sub>; 1,2-pentanediol, 2-methyl (C6) BO<sub>1</sub>; 1,2-pentanediol, 3-methyl (C6) E<sub>1-3</sub>; 1,2-pentanediol, 3-methyl (C6) n-BO<sub>1</sub>; 1,2-pentanediol, 4-methyl (C6) E<sub>1-3</sub>; 1,2-pentanediol, 4-methyl (C6) n-BO<sub>1</sub>; 1,3-pentanediol (C5) 2(Me-E<sub>1-2</sub>); 1,3pentanediol (C5) PO<sub>3-4</sub>; 1,3-pentanediol, 2,2-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3pentanediol, 2,2-dimethyl- (C7) PO<sub>1</sub>, 1,3-pentanediol, 2,2-dimethyl- (C7) n-BO<sub>2-4</sub>, 1,3-pentanediol, 2,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 2,3-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3-pentanediol, 2,4-dimethyl-(C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 2,4-dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 2,4-

dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3-pentanediol, 2-ethyl- (C7) E<sub>2-9</sub>; 1,3-pentanediol, 2ethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 2-ethyl- (C7) n-BO<sub>1-3</sub>; 1,3-pentanediol, 2-methyl-(C6) 2(Me-E<sub>1-6</sub>); 1,3-pentanediol, 2-methyl- (C6) PO<sub>2-3</sub>; 1,3-pentanediol, 2methyl- (C6) BO1; 1,3-pentanediol, 3,4-dimethyl- (C7) (Me-E1); 1,3-pentanediol, 3,4-dimethyl- (C7) PO<sub>1</sub>, 1,3-pentanediol, 3,4-dimethyl- (C7) n-BO<sub>2-4</sub>, 1,3pentanediol, 3-methyl- (C6) (Me-E<sub>1-6</sub>); 1,3-pentanediol, 3-methyl- (C6) PO<sub>2-3</sub>; 1,3pentanediol, 3-methyl- (C6) BO1; 1,3-pentanediol, 4,4-dimethyl- (C7) (Me-E1); 1,3pentanediol, 4,4-dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 4,4-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3-pentanediol, 4-methyl- (C6) (Me-E<sub>1-6</sub>); 1,3-pentanediol, 4-methyl- (C6) PO<sub>2-3</sub>, 1,3-pentanediol, 4-methyl- (C6) BO<sub>1</sub>; 1,4-pentanediol, (C5)  $2(Me-E_{1-2})$ ; 1,4pentanediol (C5)  $PO_{3-4}$ ; 1,4-pentanediol, 2,2-dimethyl-/(C7) (Me-E<sub>1</sub>); 1,4pentanediol, 2,2-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 2,2-dimethyl- (C7) n-BO<sub>2-4</sub>, 1,4-pentanediol, 2,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 2,3-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 2,4-dimethyl-(C7) (Me- $E_1$ ); 1,4-pentanediol, 2,4-dimethyl- (C7)/PO<sub>1</sub>; 1,4-pentanediol, 2,4dimethyl- (C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 2-methyl- (C6) (Me- $E_{1-6}$ ); 1,4pentanediol, 2-methyl- (C6) PO<sub>2-3</sub>; 1,4-pentanediol, 2-methyl- (C6) BO<sub>1</sub>; 1,4pentanediol, 3,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 3,3-dimethyl- (C7) PO<sub>1</sub>. 1,4-pentanediol, 3,3-dimethyl- (C7) n-BO<sub>2-4</sub>; \(\frac{1}{4}\)-pentanediol, 3,4-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 3,4-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 3,4-dimethyl-(C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 3-methyl- (C6) 2(Me-E<sub>1-6</sub>); 1,4-pentanediol, 3methyl- (C6) PO<sub>2-3</sub>; 1,4-pentanediol, 3-methyl- (C6) BO<sub>1</sub>; 1,4-pentanediol, 4methyl- (C6) 2(Me-E<sub>1-6</sub>); 1,4-pentanediol/4-methyl- (C6) PO<sub>2-3</sub>; 1,4-pentanediol, 4-methyl- (C6) BO<sub>1</sub>; 1,5-pentanediol, (C5) (Me-E<sub>4-10</sub>); 1,5-pentanediol (C5) 2(Me-E<sub>1</sub>); 1,5-pentanediol (C5) PO<sub>3</sub>; 1,5-pentanediol, 2,2-dimethyl- (C7) E<sub>1-7</sub>, 1,5pentanediol, 2,2-dimethyl- (C7) PO<sub>1</sub>; /,5-pentanediol, 2,2-dimethyl- (C7) n-BO<sub>1-2</sub>, 1,5-pentanediol, 2,3-dimethyl- (C7) E/1-7; 1,5-pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>. 1,5-pentanediol, 2,3-dimethyl- (C7)/n-BO<sub>1-2</sub>; 1,5-pentanediol, 2,4-dimethyl- (C7) E<sub>1-7</sub>; 1,5-pentanediol, 2,4-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 2,4-dimethyl- (C7) n-BO<sub>1-2</sub>; 1,5-pentanediol, 2-ethy/- (C7)  $E_{1-5}$ ; 1,5-pentanediol, 2-ethyl- (C7) n-BO<sub>1</sub>. 2; 1,5-pentanediol, 2-methyl- (C6) (Me-E<sub>1-4</sub>); 1,5-pentanediol, 2-methyl- (C6) PO<sub>2</sub>. 1,5-pentanediol, 3,3-dimethyl-/(C7) E<sub>1-7</sub>; 1,5-pentanediol, 3,3-dimethyl- (C7) PO<sub>1</sub>, 1,5-pentanediol, 3,3-dimethyl- (C7) n-BO<sub>1-2</sub>; 1,5-pentanediol, 3-methyl- (C6) (Me-E<sub>1-4</sub>); 1,5-pentanediol, 3-methyl- (C6) PO<sub>2</sub>; 2,3-pentanediol, (C5) (Me-E<sub>1-3</sub>); 2,3pentanediol, (C5) PO2; 2,3-pentanediol, 2-methyl- (C6) E1-7; 2,3-pentanediol, 2methyl- (C6) PO1; 2,3-pentanediol, 2-methyl- (C6) n-BO1-2; 2,3-pentanediol, 3methyl- (C6) E<sub>1-7</sub>; 2,3-pentanediol, 3-methyl- (C6) PO<sub>1</sub>; 2,3-pentanediol, 3-methyl(C6) n-BO<sub>1-2</sub>, 2,3-pentanediol, 4-methyl- (C6)  $E_{1-7}$ , 2,3-pentanediol, 4-methyl- (C6) PO<sub>1</sub>, 2,3-pentanediol, 4-methyl- (C6) n-BO<sub>1-2</sub>, 2,4-pentanediol, (C5) 2(Me-E<sub>1-4</sub>); 2,4-pentanediol (C5) PO<sub>4</sub>; 2,4-pentanediol, 2,3-dimethyl- (C7) (Me-E<sub>1-4</sub>); 2,4-pentanediol, 2,3-dimethyl- (C7) PO<sub>2</sub>; 2,4-pentanediol, 2,4-dimethyl- (C7) (Me-E<sub>1-4</sub>); 2,4-pentanediol, 2,4-dimethyl- (C7) PO<sub>2</sub>; 2,4-pentanediol, 2-methyl- (C7) (Me-E<sub>5-10</sub>); 2,4-pentanediol, 2-methyl- (C7) PO<sub>3</sub>; 2,4-pentanediol, 3,3-dimethyl- (C7) (Me-E<sub>1-4</sub>); 2,4-pentanediol, 3,3-dimethyl- (C7) PO<sub>2</sub>; 2,4-pentanediol, 3-methyl- (C6) (Me-E<sub>5-10</sub>); 2,4-pentanediol, 3-methyl- (C6) (Me-E<sub>5-10</sub>); 2,4-pentanediol, 3-methyl- (C6) PO<sub>3</sub>;

1,3-hexanediol (C6) (Me-E<sub>1-5</sub>); 1,3-hexanediol (C6) PO<sub>2</sub>; 1,3hexanediol (C6) BO<sub>1</sub>; 1,3-hexanediol, 2-methyl- (C7) E<sub>2-9</sub>; 1,3-hexanediol, 2methyl- (C7) PO<sub>1</sub>; 1,3-hexanediol, 2-methyl- (C7) n-BO<sub>1-3</sub>; 1,3-hexanediol, 2methyl- (C7) BO<sub>1</sub>; 1,3-hexanediol, 3-methyl- (C7) E<sub>2</sub>/9; 1,3-hexanediol, 3-methyl-(C7) PO<sub>1</sub>; 1,3-hexanediol, 3-methyl- (C7) n-BO<sub>1-3</sub>;  $\sqrt{1}$ ,3-hexanediol, 4-methyl- (C7) E<sub>2-9</sub>; 1,3-hexanediol, 4-methyl- (C7) PO<sub>1</sub>; 1,3-hexanediol, 4-methyl- (C7) n-BO<sub>1-3</sub>; 1,3-hexanediol, 5-methyl- (C7) E<sub>2-9</sub>; 1,3-hexanediol, 5-methyl- (C7) PO<sub>1</sub>; 1,3hexanediol, 5-methyl- (C7) n-BO<sub>1-3</sub>; 1,4-hexanediol (C6) (Me-E<sub>1-5</sub>); 1,4-hexanediol (C6) PO<sub>2</sub>; 1,4-hexanediol (C6) BO<sub>1</sub>; 1,4-hexanediol, 2-methyl- (C7) E<sub>2-9</sub>; 1,4hexanediol, 2-methyl- (C7) PO<sub>1</sub>; 1,4-hexanediol, 2-methyl- (C7) n-BO<sub>1-3</sub>; 1,4hexanediol, 3-methyl- (C7)  $E_{2-9}$ ; 1,4-hexanediol, 3-methyl- (C7)  $PO_1$ ; 1,4hexanediol, 3-methyl- (C7) n-BO<sub>1-3</sub>/1,4-hexanediol, 4-methyl- (C7)  $E_{2-9}$ , 1,4hexanediol, 4-methyl- (C7) PO<sub>1</sub>; 1,4-hexanediol, 4-methyl- (C7) n-BO<sub>1-3</sub>; 1,4hexanediol, 5-methyl- (C7)  $E_{2}$ , 1,4-hexanediol, 5-methyl- (C7)  $PO_1$ ; 1,4hexanediol, 5-methyl- (C7) n-BO<sub>1-3</sub>; 1,5-hexanediol (C6) (Me-E<sub>1-5</sub>); 1,5-hexanediol (C6) PO<sub>2</sub>; 1,5-hexanediol (C6) BO<sub>1</sub>; 1,5-hexanediol, 2-methyl- (C7) E<sub>2-9</sub>; 1,5hexanediol, 2-methyl- (C7) PO<sub>1</sub>, 1,5-hexanediol, 2-methyl- (C7) n-BO<sub>1-3</sub>, 1,5hexanediol, 3-methyl- (C7)  $E_{2-9}$ , 1,5-hexanediol, 3-methyl- (C7)  $PO_1$ ; 1,5hexanediol, 3-methyl- (C7) n-BO<sub>1-3</sub>, 1,5-hexanediol, 4-methyl- (C7) E<sub>2-9</sub>, 1,5hexanediol, 4-methyl- (C7) PO<sub>1</sub>; 1,5-hexanediol, 4-methyl- (C7) n-BO<sub>1-3</sub>; 1,5hexanediol, 5-methyl- (C7) E2-9; 1,5-hexanediol, 5-methyl- (C7) PO1; 1,5hexanediol, 5-methyl- (C7) n-BO<sub>1-3</sub>; 1,6-hexanediol (C6) (Me-E<sub>1-2</sub>); 1,6-hexanediol (C6) PO<sub>1-2</sub>, 1,6-hexanediol (C6) n-BO<sub>4</sub>; 1,6-hexanediol, 2-methyl- (C7) E<sub>1-5</sub>; 1,6hexanediol, 2-methyl- (C7) n-BO<sub>1-2</sub>; 1,6-hexanediol, 3-methyl- (C7) E<sub>1-5</sub>, 1,6hexanediol, 3-methyl- (C7) n-BO<sub>1-2</sub>, 2,3-hexanediol (C6) E<sub>1-5</sub>, 2,3-hexanediol (C6) n-BO<sub>1</sub>; 2,3-hexanediol (C6) BO<sub>1</sub>; 2,4-hexanediol (C6) (Me-E<sub>3-8</sub>); 2,4-hexanediol (C6), PO<sub>3</sub>, 2,4-hexanediol, 2-methyl- (C7) (Me-E<sub>1-2</sub>), 2,4-hexanediol 2-methyl- (C7)  $PO_{1-2}$ ; 2,4-hexanediol, 3-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 3-methyl- (C7) PO<sub>1-2</sub>; 2,4-hexanediol, 4-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 4-methyl- (C7)

- PO<sub>1-2</sub>; 2,4-hexanediol, 5-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 5-methyl- (C7) PO<sub>1-2</sub>; 2,5-hexanediol (C6) (Me-E<sub>3-8</sub>); 2,5-hexanediol (C6) PO<sub>3</sub>; 2,5-hexanediol, 2-methyl- (C7) (Me-E<sub>1-2</sub>); 2,5-hexanediol 2-methyl- (C7) PO<sub>1-2</sub>; 2,5-hexanediol, 3-methyl- (C7) (Me-E<sub>1-2</sub>); 2,5-hexanediol 3-methyl- (C7) PO<sub>1-2</sub>; 3,4-hexanediol (C6) EO<sub>1-5</sub>; 3,4-hexanediol (C6) n-BO<sub>1</sub>; 3,4-hexanediol (C6) BO<sub>1</sub>;
- 5. 1,3-heptanediol (C7)  $E_{1-7}$ ; 1,3-heptanediol (C7)  $PO_1$ ; 1,3-heptanediol (C7) n-BO<sub>1-2</sub>; 1,4-heptanediol (C7)  $E_{1-7}$ ; 1,4-heptanediol (C7)  $PO_1$ ; 1,4-heptanediol (C7)  $PO_1$ ; 1,5-heptanediol (C7)  $PO_1$ ; 1,5-heptanediol (C7)  $PO_1$ ; 1,6-heptanediol (C7)  $PO_1$ ; 2,4-heptanediol (C7)  $PO_1$ ; 2,4-heptanediol (C7)  $PO_1$ ; 2,4-heptanediol (C7)  $PO_1$ ; 2,5-heptanediol (C7)  $PO_1$ ; 2,5-heptanediol (C7)  $PO_1$ ; 2,5-heptanediol (C7)  $PO_1$ ; 2,6-heptanediol (C7)  $PO_1$ ; 3,5-heptanediol (P7)  $PO_1$ ; 3
- 1,3-butanediol, 3-methyl-2-isopropyl- (C8) PO1; 2,4-pentanediol, 2,3,3-trimethyl- (C8) PO<sub>1</sub>; 1,3-butanediol, 2,2-diethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 2,3-dimethyl- (C8)  $E_{2-5}$ ; 2,4-hexanediol, 2,4-dimethyl- (C8)  $E_{2-5}$ ; 2,4-hexanediol, 2,5-dimethyl- (C8)  $E_{2-5}$ ; 2,4-hexanediol, 3,3-dimethyl- (C8)  $E_{2-5}$ ; 2,4-hexanediol, 3,4-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 3,5-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 4,5-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 5,5-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 2,3-dimethyl- (C8)  $E_{2-5}$ ; 2,5-hexanediol, 2,4-dimethyl- (C8)  $E_{2-5}$ ; 2,5-hexanediol, 2,5-dimethyl- (C8)  $E_{2-5}$ ; 2,5-hexanediol, 3,3-dimethyl- (C8)  $E_{2-5}$ ; 2,5-hexanediol, 3,4-dimethyl- (C8) E<sub>2-5</sub>; 3,5-heptanediol, 3-methyl- (C8) E<sub>2-5</sub>; 1,3-butanediol, 2,2diethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,3-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,4-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,5-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4hexanediol, 3,3-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 3,4-dimethyl- (C8) n-BO<sub>1</sub> 2; 2,4-hexanediol, 3,5-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 4,5-dimethyl- (C8) n-BO<sub>1-2</sub>, 2,4-hexanediol, 5,5-dimethyl-, n-BO<sub>1-2</sub>, 2,5-hexanediol, 2,3-dimethyl-(C8) n-BO<sub>1-2</sub>; 2,5-hexanediol, 2,4-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,5-hexanediol, 2,5dimethyl- (C8)  $n-BO_{1-2}$ ; 2,5-hexanediol, 3,3-dimethyl- (C8)  $n-BO_{1-2}$ ; 2,5hexanediol, 3,4-dimethyl- (C8) n-BO<sub>1-2</sub>, 3,5-heptanediol, 3-methyl- (C8) n-BO<sub>1-2</sub>, 1,3-propanediol, 2-(1,2-dimethylpropyl)- (C8) n-BO<sub>1</sub>; 1,3-butanediol, 2-ethyl-2,3dimethyl- (C8) n-BO<sub>1</sub>, 1,3-butanediol, 2-methyl-2-isopropyl- (C8) n-BO<sub>1</sub>, 1,4butanediol, 3-methyl-2-isopropyl- (C8) n-BO<sub>1</sub>, 1,3-pentanediol, 2,2,3-trimethyl-(C8) n-BO<sub>1</sub>; 1,3-pentanediol, 2,2,4-trimethyl- (C8) n-BO<sub>1</sub>; 1,3-pentanediol, 2,4,4-

trimethyl- (C8) n-BO<sub>1</sub>, 1,3-pentanediol, 3,4,4-trimethyl- (C8) n/BO<sub>1</sub>, 1,4pentanediol, 2,2,3-trimethyl- (C8) n-BO<sub>1</sub>; 1,4-pentanediol, 2,2,4-trimethyl- (C8) n-BO<sub>1</sub>; 1,4-pentanediol, 2,3,3-trimethyl- (C8) n-BO<sub>1</sub>; 1,4-pentanediol, 2,3,4-trimethyl-(C8) n-BO<sub>1</sub>; 1,4-pentanediol, 3,3,4-trimethyl- (C8) n-BO<sub>1</sub>; 2,4-pentanediol, 2,3,4trimethyl- (C8) n-BO<sub>1</sub>; 2,4-hexanediol, 4-ethyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 2methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 3-methyl- (C8) n-BO<sub>1</sub>;/2,4-heptanediol, 4methyl- (C8) n-BO<sub>1</sub>, 2,4-heptanediol, 5-methyl- (C8) n-BO<sub>1</sub>, 2,4-heptanediol, 6methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 2-methyl- (C8) n-BØ<sub>1</sub>; 2,5-heptanediol, 3methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 4-methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 5methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 6-methyl- (C8) n-BO<sub>1</sub>; 2,6-heptanediol, 2methyl- (C8) n-BO<sub>1</sub>; 2,6-heptanediol, 3-methyl- (C8)/n-BO<sub>1</sub>; 2,6-heptanediol, 4methyl- (C8) n-BO<sub>1</sub>; 3,5-heptanediol, 2-methyl- (C8) n-BO<sub>1</sub>; 1,3-propanediol, 2-(1,2-dimethylpropyl)- (C8)  $E_{1-3}$ ; 1,3-butanediol, 2-ethyl-2,3-dimethyl- (C8)  $E_{1-3}$ ; 1,3-butanediol, 2-methyl-2-isopropyl- (C8)  $E_{1/3}$ ; 1,4-butanediol, 3-methyl-2isopropyl- (C8) E<sub>1-3</sub>; 1,3-pentanediol, 2,2,3-trimethyl- (C8) E<sub>1-3</sub>; 1,3-pentanediol, 2,2,4-trimethyl- (C8)  $E_{1-3}$ ; 1,3-pentanediol/2,4,4-trimethyl- (C8)  $E_{1-3}$ ; 1,3pentanediol, 3,4,4-trimethyl- (C8) E<sub>1-3</sub>; 1,4-pentanediol, 2,2,3-trimethyl- (C8) E<sub>1-3</sub>; 1,4-pentanediol, 2,2,4-trimethyl- (C8)  $E_{1-3}$ ; 1,4-pentanediol, 2,3,3-trimethyl- (C8)  $E_{1-3}$ ; 1,4-pentanediol, 2,3,4-trimethyl- (C8)  $E_{1-3}$ ; 1,4-pentanediol, 3,3,4-trimethyl-(C8)  $E_{1-3}$ ; 2,4-pentanediol, 2,3,4-trimethyl- (C8)  $E_{1-3}$ ; 2,4-hexanediol, 4-ethyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol, 2-methyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol, 3-methyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol, 4-methyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol, 5-methyl- (C8)  $E_{1-3}$ ; 2,4heptanediol, 6-methyl- (C8)  $E_{1-3}$ ; 2,5-heptanediol, 2-methyl- (C8)  $E_{1-3}$ ; 2,5heptanediol, 3-methyl- (C8) E<sub>1-3</sub>; 2,5-heptanediol, 4-methyl- (C8) E<sub>1-3</sub>; 2,5heptanediol, 5-methyl- (C8)  $E_{1-3}$ ; 2,5-heptanediol, 6-methyl- (C8)  $E_{1-3}$ ; 2,6heptanediol, 2-methyl-/(C8)  $E_{1-3}$ , 2,6-heptanediol, 3-methyl- (C8)  $E_{1-3}$ , 2,6heptanediol, 4-methyl- (C8) E<sub>1-3</sub>; and/or 3,5-heptanediol, 2-methyl- (C8) E<sub>1-3</sub>, and IX. mixtures thereof,

with the exception of the following specific compounds:

3,7-Octadiene-2,5-diol, 2,7-dimethyl-; 4,6-Octadiene-1,2-diol, 3,5-dimethyl-; 4,6-Octadiene-1,2-diol, 3,5-dimethyl-; 4,6-Octadiene-1,2-diol, 3,5-dimethyl-; 4,6-Octadiene-1,2-diol, 3,5-dimethyl-; 4,6-Octadiene-1,2-diol, 3,5-dimethyl-; 1-Hexene-3,4-diol, 5,5-dimethyl-; 6-Heptene-1,4-diol, 4-methyl-; 4-Octene-3,6-diol; 4-Octene-3,6-diol; 3-Octene-1,2-diol; 3-Nonene-2,5-diol; 7-Nonene-4,5-diol; 6-Nonene-2,3-diol; 6-Heptene-2,4-diol, 5-methyl-; 6-Octene-1,2-diol, 7-methyl-3-methylene-; 2,7-Octadiene-1,6-diol, 2,6-dimethyl-; 1,3-Propanediol, 2-(2-methylene-pentyl)-; 3-Heptene-2,6-diol, 2,6-dimethyl-; 3-Heptene-2,6-diol, 3,6-dimethyl-; 3-Heptene

dimethyl-; 5-Hexene-2,4-diol, 3,5-dimethyl-; 4-Hexene-1,2-diol, 2,5-dimethyl-; 4-Hexene-1,2-diol, 2,5-dimethyl-, 7-Octene-1,6-diol, 2-Hexene-1,4-diol, 2,5-dimethyl-, 2-Hexene-1,4-diol, 2,5-dimethyl-; 1,4-Hexanediol, 5-methyl-2-methylene-; 4-Octene-2,3-diol; Nonene-1,4-diol; 6-Heptene-1,4-diol, 4-methyl-; 6-Octene-3,5-diol, 4methyl-; 2,6-Octadiene-1,8-diol, 2,6-dimethyl-; (8-Hydroxygeraniol); 1-Heptene-3,5-diol, 2,4-dimethyl- 2,4-Hexanediol, 5-methyl-3-methylene-; 2,4-Hexanediol, 5methyl-3-methylene-; 5-Hexene-2,4-diol, 3-ethenyl-2,5-dimethyl-; 5-Hexene-2,4-diol, 3-ethenyl-2,5-dimethyl-; 6-Heptene-2,4-diol, 5-methyl-; 4,9-Decadiene-1,8-diol; 5-Hexene-1,3-diol, 2,4-dimethyl-; 7-Octene-1,3-diol, 2-methyl-/5-Heptene-3-d-1,2diol, 2,6-dimethyl-; 5-Heptene-3-d-1,2-diol, 2,6-dimethyl-; A-Nonene-2,8-diol; 4-Nonene-2,8-diol; 5-Hexene-2,3-diol, 2,3-dimethyl-; 2-Butene-1,4-diol, 2-butyl-; 2,4-Hexadiene-1,6-diol, 3-(1,1-dimethylethyl)-; 6-Octene-1,4-diol, 7-methyl-; 6-Heptene-1,4-diol, 5,6-dimethyl-; 6-Heptene-1,4-diol, 5,6-dimethyl-; 7-Octene-2,5-diol, 7methyl-, 7-Octene-2,5-diol, 7-methyl-, 4-Hexene-1,3-diol, 2,4-dimethyl-, 4-Octene-2,7-diol; 4-Octene-2,7-diol; 3-Heptene-1,2-diol, 5-methyl-; 3-Heptene-1,2-diol, 5methyl-; 3,7-Octadiene-2,6-diol, 2,6-dimethyl-; 8-Nonene-1,7-diol; 2,6-Octadiene-1,4-diol, 3,7-dimethyl- (Isorosiridol); 5-Hexene-1,4-diol, 2,4-dimethyl-; 1-Heptene-3,4-diol, 6-methyl-; 3-Heptene-1,5-diol, 4,6-dimethyl-; 3-Octene-1,5-diol, 4-methyl-; 3,9-Decadiene-1,2-diol; 7-Octene-2,3-diol, 2-methyl-; 7-Octene-2,3-diol, 2-methyl-; 6-Nonene-2,3-diol; 2,5-Hexanediol, 3-methyl-4-methylene-; 6-Heptene-1,4-diol, 2methyl-; 6-Octene-1,5-diol; 1-Octene-3,4-diol; /7-Octene-1,6-diol, 5-methyl-; 7-Octene-1,6-diol, 5-methyl-; 1,3-Butanediol, 2-methyl-2-(1-methylethenyl)-; 1,3-Pentanediol, 2-ethenyl-4,4-dimethyl-; 3,5-Octanediol, 4-methylene-; 3,5-Octanediol, 4-methylene-; 6-Heptene-2,3-diol, 2-methyl-; 6-Heptene-2,3-diol, 2,6-dimethyl-; 6-Heptene-2,3-diol, 2-methyl-; 7-Octene-1,3-diol, 4-methyl-; 1,3-Butanediol, 2-methyl-2-(1-methyl-2-propenyl)-; 5-Heptene-1,2-diol, 2,6-dimethyl-; 1-Nonene-3,4-diol; 5-Heptene-1,2-diol, 3-methyl-; 3,7-Octadiene-2,6-diol, 2,6-dimethyl-; 6-Heptene-1,3diol, 2,2-dimethyl-, 4-Nonene-1,3-diol, 1,4-Pentanediol, 3-methyl-2-(2-propenyl)-, 1-Nonene-3,4-diol; 8-Nonene-1,2-diol; 3-Octene-1,2-diol; 1,9-Decadiene-4,6-diol; 1.9-Decadiene-4,6-diol; 5-Hexene-1,3-diol, / 2,2-dimethyl-; 1,3-Propanediol, 2-(1pentenyl)-; 1,3-Propanediol, 2-(3-methyl/1-butenyl)-; 1,3-Propanediol, 2-(3-methyl-1-butenyl)-; 8-Nonene-1,3-diol; 2,4-Octadiene-1,8-diol, 2,7-dimethyl-; 5-Heptene-1,2-diol, 6-methyl-; 3,9-Decadiene-1,2-diol; 3-Nonene-1,2-diol; 6-Nonene-1,2-diol, 4-Hexene-1,3-diol, 2,4-dimethyl-; 2,4-Octadiene-1,7-diol, 3,7-dimethyl-; 4-Hexene-2,3-diol, 3,4-dimethyl-; 4-Hexene-2,3-diol, 3,4-dimethyl-; 4-Hexene-2,3-diol, 3,4dimethyl-; 4-Hexene-2,3-diol, 3,4-dimethyl-; 5-Hexene-2,3-diol, 3,4-dimethyl-; 5-Hexene-2.3-diol. 3.4-dimethyl-; 5-Hexene-2.3-diol, 3,4-dimethyl-; 1,3-Butanediol, 2methyl-2-(2-propenyl)-; 6-Heptene-2,5-diol, 4,6-dimethyl-; 6-Heptene-1,5-diol, 6methyl-, 6-Heptene-2,5-diol, 4,6-dimethyl-, 1,5-Pentanediol, 2-(2-propenyl)-, 5-Hexene-2,3-diol, 3,5-dimethyl-; 5-Hexene-2,3-diol, 3,5-dimethyl-; Nonenediol; Octenediol; 5-Hexene-1,3-diol, 3,5-dimethyl-; 4-Nonene-1,8-diol; 4-Nonene-1,7diol; 4-Nonene-1,6-diol; 6-Nonene-1,4-diol; 2-Nonene-1,4-diol; 8-Nonene-2,5-diol; 5-Heptene-1,2-diol, 2-ethenyl-6-methyl-; 4-Hexene-2,3-diol, 2,5-dimethyl-; 5-Heptene-2,3-diol, 2,6-dimethyl-; 1-Heptene-3,5-diol, 2,6-dimethyl-; 1-Heptene-3,5diol. 2,6-dimethyl-; 7-Octene-1,3-diol, 7-methyl-; 1,3-Propanediol, 2-methyl-2-(3methyl-3-butenyl)-; 5-Heptene-1,2-diol, 2,6-dimethyl-; 5/7-Octadiene-2,3-diol, 2,6dimethyl-; 5,7-Octadiene-2,3-diol, 2,6-dimethyl-; 5-Hexene-1,2-diol, 2-ethyl-; 2,4-Nonadiene-4-d-1,7-diol, 6-methyl-, 2,4-Nonadiene-1,6,7-d3-1,7-diol, 6-methyl-, 2,4-Nonadiene-1,7-diol, 6-methyl-; 7-Octene-2,3-diol, 2-methyl-6-methylene-; 1,3-Butanediol. 3-methyl-2-(4-pentenylidene)-: 1.3-Butanediol. 3-methyl-2-(4pentenylidene)-; 2-Hexene-1,4-diol, 5,5-dimethyl-; 2-Hexene-1,4-diol, 5,5-dimethyl-; 2-Nonene-1,4-diol, 2-Nonene-1,4-diol, 7-Octene-2,3-diol, 2-methyl-6-methylene-, 5-Octene-1,3-diol; 7-Octene-1,3-diol, 2-methyl-; 4-Heptene-1,3-diol, 2-methyl-; 4-Octene-2,3-d2-1,2-diol; 4-Octene-2,3-d2-1,2-diol; 5-Heptene-1,2-diol, 3-methyl-; 5-Octene-1,2-diol; 3,7-Octadiene-1,6-diol, /2,6-dimethyl-; 5-Heptene-1,2-diol, 2,6dimethyl-; 1,7-Octadiene-4,5-diol, 4,5-dimethyl-; 1,7-Octadiene-4,5-diol, 4,5dimethyl-; 5-Heptene-1,3-diol, 2-methyl-; 5-Heptene-1,3-diol, 2-methyl-; 3-Hexene-1,6-diol, 3,4-dimethyl-; 3-Hexene-1,6-diol, 3,4-dimethyl-; 2,6-Octadiene-1-t-1,8-diol, 2,6-dimethyl-; 2,6-Octadiene-1-t-1/8-diol, 2,6-dimethyl-; 2,6-Octadiene-1-d-1,8-diol, 2,6-dimethyl-, 2,6-Octadiene-1-d-1-t-1,8-diol, 2,6-dimethyl-; 2,6-Octadiene-1-d-1-t-1,8-diol, 2,6-dimethyl-; 2,6-Octadiene-1-d-1,8-diol, 2,6-dimethyl-; 2-Heptene-1,5diol, 6-methyl-; 2-Heptene-1,5-diol, 6-methyl-; 8,9-Decadiene-3,5-diol; 8,9-Decadiene-3,5-diol; 4,6-Nonadiene-1,3-diol, 8-methyl-; 3,5-Nonadiene-1,7-diol, 8methyl-; 5-Heptene-1,3-diol, 2,4-dimethyl-; 2-Nonene-1,9-diol; 2-Nonene-1,9-diol; 1,3-Butanediol, 2-ethyl-2-(2-propenyl)-; 3-Heptene-1,5-diol, 6-methyl-; Pentanediol, 2-ethenyl-4-methyl-; 1,3-Pentanediol, 2-ethenyl-4-methyl-; 5-Hexene-2,3-diol, 3,4-dimethyl-; 5-Hexene-2,3-diol, 2,3,4-trimethyl-; 4-Pentene-1,2-diol, 2,3,3-trimethyl-;  $\sqrt{1,3}$ -Propanediol, 2-(2-methyl-2-propenyl)-2-(2-propenyl)-; 1,3-Propanediol, 2-(2-butenyl)-2-(2-propenyl)-; 5-Hexene-1,2-diol, 2-ethyl-, 1,4-Butanediol, 2-(4-methyl-3-pentenylidene)- (β-Acaridiol), 6-Heptene-1,3-diol, 2methyl-; 2,6-Octadiene-1,8-diol-2-13C, 2,6-dimethyl-; 1-Hexene-3,4-diol, 5,5dimethyl-;/1-Hexene-3,4-diol, 5,5-dimethyl-; 1-Nonene-3,4-diol; 8-Nonene-2,4-diol; 8-Nonene-2,4-diol; 7-Octene-1,2-diol, 2-methyl-; 1-Nonene-3,5-diol; 2,7-Octadiene-1,6-diol, 2,6-dimethyl-; 7-Octene-1,2-diol; 7-Octene-1,2-diol; 2,5-Octadiene-1,7diol, 3,7-dimethyl-: 1,3-Propanediol, 2-(2,2-dimethylpropylidene)-; 6-Octehe-1,2diol. 7-methyl-3-methylene-: 2.8-Decadiene-1.10-diol: 6-Octene-1.5-diol. 7-methyl-; 1,3-Butanediol, 2-(1-ethyl-1-propenyl)-; 4-Hexene-1,2-diol, 4-ethyl-3-methyl-; 8-Nonene-1.3-diol: 1,4-Butanediol, 2-(3-methyl-2-butenyl)-3-methylene-2.6-Heptadiene-1,4-diol, 2,5,5-trimethyl-; 2,6-Heptadiene-1,4-diol, 2,5,5-trimethyl-; 8-Nonene-2,4-diol; 2,6-Heptanediol, 4-methylene-; 3-Hexene-3,4-diol, 2,5-dimethyl-; 4-Octene-4,5-diol; 5-Hexene-1,2-diol, 2,3-dimethyl-; 3-Hexene-1,6-diol, 2-ethenyl-2,5-dimethyl-, 3-Hexene-1,5-diol, 2,4-dimethyl-; 3-Hexene-1,5-diol, 2,4-dimethyl-; 3,7-Octadiene-2,6-diol, 2,6-dimethyl-; 3,6-Octadiene-1,2-diol, /3,7-dimethyl-; 7-Octene-2,3-diol, 6-methyl-; 7-Octene methyl-; 2,5-Octadiene-1,7-diol, 3,7-dimethyl-; 6-Octene-1,3-diol, 7-methyl-; Decadienediol; 6-Heptene-1,2-diol, 2,3-dimethyl-; 4-Hexene-1,3-diol, 3,5-dimethyl-; 4-Pentene-1,3-diol, 2-(1,1-dimethylethyl)-; 4-Pentene-1,3-diol, 2-(1,1-dimethylethyl)-; 1-Heptene-3,5-diol, 6,6-dimethyl-; 1-Heptene-3,5-diol, 6,6-dimethyl-; 1,3-Hexanediol, 5-methyl-4-methylene-; 4-Octene-1,2-diol; 2,3-Heptanediol, 3-ethenyl-; 2,3-Heptanediol, 3-ethenyl-; 5-Hexene-1,3-diol, 2,4-dimethyl-; 5-Hexene-1,3-diol, 2,4-dimethyl-; 5-Hexene-1,3-diol, 2,4-dimethyl-; 2,6-Octadiene-1-t-1,8-diol, 3,7dimethyl-, 8-Nonene-2,4-diol, 8-Nonene-2,4-diol, 1,3-Octanediol, 2-methylene-, 8-Nonene-1.3-diol: 5-Heptene-1.4-diol, 3.6-dimethyl-; 5-Heptene-1.4-diol, 2,6dimethyl-; 4-Octene-2,3-diol; 4-Octene-2,3-diol; 5,7-Octadiene-1,4-diol, dimethyl-; 7-Octene-1,3-diol, 7-methyl-; 2-Heptene-1,5-diol, 5-ethyl-; 2-Heptene-1,5-diol, 5-ethyl-; 1,3-Pentanediol, 2-ethenyl-3-ethyl-; 5-Heptene-2,4-diol, 2,3dimethyl-; 5-Heptene-2,4-diol, 2,3-dimethyl-; 8-Nonene-3,4-diol; 8-Nonene-3,4-diol; 5-Hexene-1,3-diol, 4,5-dimethyl-; 5-Hexene-1,3-diol, 4,5-dimethyl-; 4,6-Octadiene-2,3-diol, 3,7-dimethyl-; 1,3-Butanediol, /2,2-diallyl-; 1,9-Decadiene-3,8-diol; 2-Heptene-1,4-diol, 5,6-dimethyl-; 2-Heptene-1,4-diol, 5-methyl-; 2-Heptene-1,4-diol, 5,6-dimethyl-; 2-Heptene-1,4-diol, /5-methyl-; 2,8-Decadiene-5,6-diol; Octadiene-1,6-diol, 2,6-dimethyl- (8-Hydroxylinalool); 6-Heptene-1,2-diol, 2-methyl-5-Hexene-1,3-diol, 2,3-dimethyl/; 2,6-Octadiene-1,8-diol, 6-methyl-2-(methyl-13C)-; 1,3-Propanediol, 2-(5-hexenyl)-; 8-Nonene-3,4-diol; 5-Hexene-1,3-diol, 3ethyl-: 7-Octene-3.4-diol: 6-Heptene-1,2-diol, 2-methyl-; 6-Heptene-2,4-diol, 4-(2propenyl)-: 2.6-Octadiene-1.4-diol, 3,7-dimethyl- (Rosiridol); 8-Nonene-3,4-diol; 6-Heptene-2,3-diol, 6-methyl-; 6-Heptene-2,3-diol, 2,6-dimethyl-; 4-Hexene-2,3-diol, 2,5-dimethyl-; 4,6-Octadiene-2,3-diol, 2,6-dimethyl-; 7-Octene-2,3-diol, 2-methyl-6methylene-; 7-Octene-2,3-diol, 6-methyl-; 4,6-Octadiene-2,3-diol, 2,6-dimethyl-; 1,4-Heptanediol, 6-methyl-5-methylene-, 2-Butene-1,4-diol, 2-(4-methyl-3-pentenyl)- (a-Acaridiol); 4-Octene-1,2-diol; 4-Octene-1,2-diol; 7-Octene-2,4-diol; 6-Heptene-2,4diol, 3-methyl-; 6-Heptene-2,4-diol, 3-methyl-; 3-Heptene-2,5-diol, 2,4-dimethyl-; 1,3-Butanediol, 2-(3-methyl-2-butenyl)-; 7-Octene-3,5-diol, 2-methyl-; 7-Octene-3,5-diol, 2-methyl-; 6-Heptene-2,4-diol, 5,5-dimethyl-; 6-Heptene-2,4-diol, 5,5-dimethyl-; 1,3-Propanediol, 2-methyl-2-(2-methylallyl)-; 2-Heptene-1,6-diol, 6-methyl-; 1,3-Butanediol, 2-allyl-3-methyl-; 2-Nonene-1,4-diol; 5-Hexene-2,3-diol, 4-ethenyl-2,5-dimethyl-; 5-Hexene-2,3-diol, 4-ethenyl-2,5-dimethyl-; 2-Nonene-1,4-diol; 5-Heptene-1,3-diol, 3,6-dimethyl-; 1,5-Hexanediol, 2-(1-methylethenyl)-; and 1,3-Propanediol, 2-(1-pentenyl)-.

- 5. The material of Claim 1 that is a mixture of the compounds A., B., and/or C.
- 6. The material of Claim 1 which is a mixture of 8-carbon-diol isomers primarily consisting of: 2,2,4-trimethyl-1,3-pentanediol; 2-ethyl-1,3-hexanediol; 2,2-dimethyl-1,3-pentanediol; 2-ethyl-3-methyl-1,3-pentanediol; 3,5-octanediol; 2,2-dimethyl-2,4-hexanediol; 2-methyl-3,5-heptanediol; and/or 3-methyl-3,5-heptanediol, the level of any individual diol isomer being less than about 90% of any mixture.
- 7. The material of Claim 6 wherein the level of any individual diol isomer is less than about 80% of any mixture.
- 8. The material of Claim 6 wherein the level of any individual diol isomer is less than about 70% of any mixture,
- 9. The material of Claim 6 wherein the level of any individual diol isomer is less than about 60% of any mixture.
- 10. The material of Claim 6 wherein the level of any individual diol isomer is less than about 50% of any mixture.
- 11. An aqueous, stable, fabric softener composition comprising:
  - A. from about 2% to about 80% of fabric softener active selected from the group consisting of:
    - 1. fabric softener compound having the formula:

$$\left[ (R)_{4-m} - N^{(+)} - [(CH_2)_n - Y - R^{\frac{1}{2}}_m] X^{(-)} \right]$$
 (1)

wherein each R substituent is H, or a short chain  $C_1$ - $C_6$  alkyl or hydroxyalkyl group, benzyl, or mixtures thereof; each m is 2 or 3; each n is from 1 to about 4; each Y is -O-(O)C-, -(R)N-(O)C-, -C(O)-N(R)-, or -C(O)-O-, but not -OC(O)O-; the sum of carbons in each  $R^1$ , or  $YR^1$  when Y is -O-(O)C- or -(R)N-(O)C-, being  $C_6$ - $C_{22}$ , but when the sum of carbons in one  $R^1$ , or  $YR^1$ , is less than about 12, then the other  $R^1$ , or  $YR^1$ , sum is at least about 16, with each  $R^1$  being a long chain hydrocarbyl, or substituted hydrocarbyl substituent group, and for  $R^1$ , or  $YR^1$ ,  $C_{16}$ - $C_{20}$  hydrocarbyl or substituted hydrocarbyl substituent groups, the Iodine Value of a  $YR^1$  fatty acid which contains this  $R^1$  group is from about 20 to about 140, and for  $R^1$ , or  $YR^1$ ,  $C_8$ - $C_{14}$ , hydrocarbyl, or substituted hydrocarbyl substituent groups, the Iodine Value of a fatty acid which contains this  $R^1$  group is about 10 or less;

2. fabric softener compound having the formula:

$$\begin{bmatrix} R_3 N^{(+)} CH_2 CH & YR^1 \\ CH_2 YR^1 & \\ CH_2 YR^1 & \\ & (2) \end{bmatrix}$$

wherein each Y, R,  $R^1$ , and  $X^{(-)}$  have the same meanings as before, and

- 3. mixtures thereof:
- B. less than about 40% by weight of the composition of principal solvent having a ClogP of from about 0.15 to about 0.64, and at least some degree of asymmetry, said principal solvent containing insufficient amounts of solvents selected from the group consisting of: 2,2,4-trimethyl-1,3-pentane diol; the ethoxylate, diethoxylate, or triethoxylate derivatives of 2,2,4-trimethyl-1,3-pentane diol; and/or 2-ethylhexyl-1,3-diol, to provide an aqueous stable composition by themselves;
  - C. optionally, an effective amount, sufficient to improve clarity, of low molecular weight water soluble solvents like ethanol, isopropanol, propylene glycol, 1,3-propanediol, and propylene carbonate, said

water soluble solvents being at a level that will not form clear compositions by themselves;

- D. optionally, an effective amount to improve clarity, of water soluble calcium and/or magnesium salt; and
- E. the balance being water.
- 12. The aqueous, stable, fabric softener composition of Claim 11 comprising:
  - A. from about 13% to about 75% of said fabric softener active selected from the group consisting of:
    - 1. fabric softener compound having the formula:

$$(R)_{4-m} - N^{(+)} - [(CH_2)_n - Y - R^{1}]_m$$
(1)

wherein each R substituent is H, or a short chain  $C_1$ - $C_3$  alkyl or hydroxyalkyl group, benzyl or mixtures thereof; each m is 2; each n is from 2 to about 3; each Y is -O-(O)C-; each  $R^1$  is a long chain Co- $C_{19}$  hydrocarbyl, and for  $R^1$   $C_{15}$ - $C_{19}$  hydrocarbyl or substituted hydrocarbyl substituent groups, the Iodine Value of the corresponding fatty acid of this  $R^1$  group is from about 50 to about 130; and for  $R^1$   $C_7$ - $C_{13}$ , or substituted hydrocarbyl substituent groups, the Iodine Value of the corresponding fatty acid of  $R^1$  group is about 10 or less;

2. fabric softener compound having the formula:

$$\begin{bmatrix} R_3 N(+) CH_2 CH & YR^1 \\ CH_2 YR^1 \end{bmatrix} X^{(-)}$$
(2)

wherein each Y, R,  $R^1$ , and  $X^{(-)}$  have the same meanings as before; and

mixtures thereof;

B. from about 10% to about 35% by weight of the composition of said principal solvent, said principal solvent having a ClogP of from about 0.25 to about 0.62;

- C. optionally, from about 1% to about 10%, and sufficient to improve clarity, of low molecular weight water soluble solvents like ethanol, isopropanol, propylene glycol, 1,3-propanediol, propylene carbonate, said water soluble solvents being at a level that will not form clear compositions by themselves;
- D. optionally, from 0% to about 2%, and sufficient to improve clarity, achieve the desired viscosity, or improve clarity and achieve the desired viscosity, of water soluble calcium and/or magnesium salt; and
- E. from about 10% to about 80% water.
- 13. The aqueous, stable, fabric softener composition of Claim 12 comprising:
  - A. from about 17% to about 70% of said fabric softener active selected from the group consisting of:
    - 1. fabric softener compound having the formula:

$$\left[ (R)_{4-m} - N^{(+)} - [(CH_2)_n - Y - R^{\frac{1}{2}}]_m \right] X^{(-)}$$
 (1)

wherein each R substituent is H, or a short chain C<sub>1</sub>-C<sub>3</sub> alkyl or hydroxyalkyl group, benzyl or mixtures thereof; each m is 2; each n is from 2 to about 3; each Y is -O-(O)C-; each R<sup>1</sup> is a long chain C<sub>7</sub>-C<sub>17</sub> hydrocarbyl, or substituted hydrocarbyl substituent, and for R<sup>1</sup> C<sub>15</sub>-C<sub>17</sub> hydrocarbyl or substituted hydrocarbyl substituent groups, the Iodine Value of the corresponding fatty acid of this R<sup>1</sup> group is from about 70 to about 115; and for R<sup>1</sup> C<sub>7</sub>-C<sub>13</sub>, or substituted hydrocarbyl substituent groups, the Iodine Value of the corresponding fatty acid of R<sup>1</sup> group is about 5 or less;

2. fabric softener compound having the formula:

$$\begin{bmatrix} R_3 N^{(+)}CH_2CH & YR^1 \\ CH_2YR^1 \end{bmatrix} X^{(-)}$$
(2)

wherein each Y, R,  $R^1$ , and  $X^{(-)}$  have the same meanings as before; and

- 3. mixtures thereof,
- B. from about 12% to about 35% by weight of the composition of said principal solvent, said principal solvent having a ClogP of from about 0.40 to about 0.60;
- C. optionally, from about 2% to 8%, and sufficient to improve clarity, of low molecular weight water soluble solvents like ethanol, isopropanol, propylene glycol, 1,3-propanediol, propylene carbonate;
- D. optionally, from about 0.05% to about 0.5%, and sufficient to improve clarity, achieve the desired viscosity, or improve clarity and achieve the desired viscosity, of water soluble calcium and/or magnesium salt; and
- E. from about 20% to about 80% water.
- 14. The aqueous, stable, fabric softener composition of Claim 13, said composition being clear and comprising:
  - A. from about 19% to about 65% by weight of the composition, of said fabric softener:
    - 1. fabric softener compound having the formula:

$$\left[ (R)_{4-m} - N^{(+)} - [(CH_2)_m - Y - R^{\frac{1}{2}}]_m \right] X^{(-)}$$
 (1)

wherein each R substituent is methyl, ethyl, propyl, hydroxyethyl, benzyl or mixtures thereof; each n is 2; each R<sup>1</sup> is a long chain C<sub>13</sub>-C<sub>17</sub> straight chain alkyl or alkylene, and for R<sup>1</sup> C<sub>15</sub>-C<sub>17</sub> hydrocarbyl or substituted hydrocarbyl substituent groups, the Iodine Value of the corresponding fatty acid of this R<sup>1</sup> group is from about 70 to about 115;

- B. from about 14% to about 35% by weight of the composition of said principal solvent, said principal solvent having a ClogP of from about 0.40 to about 0.60;
- C. optionally, from about 2% to 8%, and sufficient to improve clarity, of low molecular weight water soluble solvents selected from the group consisting of: ethanol, isopropanol, propylene glycol, 1,3-propanediol, and propylene carbonate;

- D. optionally, from about 0.1% to about 0.25%, and sufficient to improve clarity, achieve the desired viscosity, or improve clarity and achieve the desired viscosity, of water soluble calcium or magnesium chloride, acetate, or nitrate; and
- E. from about 30% to about 70% water.
- 15. The composition of Claim 11 wherein said ClogP is from about 0.25 to about 0.62.
- 16. The composition of any of Claims 11-15 wherein said principal solvent is selected from the group consisting of: n-propanol; 2-butanol; 2-methyl-2-propanol; and mixtures thereof.
- 17. The composition of any of Claims 11-15 wherein said principal solvent is selected from the group consisting of: 2,3-butanediol, 2,3-dimethyl-; 1,2-butanediol, 2,3-dimethyl-; 1,2-butanediol, 3,3-dimethyl-; 2,3-pentanediol, 2-methyl-; 2,3-pentanediol, 3-methyl-; 2,3-pentanediol; 3,4-hexanediol; 1,2-butanediol, 2-ethyl-; 1,2-pentanediol, 2-methyl-; 1,2-pentanediol, 3-methyl-; 1,2-pentanediol, 4-methyl-; 1,2-hexanediol; and mixtures thereof;
- 18. The composition of Claim 17 wherein said principal solvent is selected from the group consisting of:
- 1,2-butanediol, 2,3-dimethyl-; 1,2-butanediol, 3,3-dimethyl-; 2,3-pentanediol, 2-methyl-; 2,3-pentanediol, 3-methyl-; 2,3-pentanediol, 4-methyl-; 2,3-hexanediol, 3,4-hexanediol; 1,2-butanediol, 2-ethyl-; 1,2-pentanediol, 2-methyl-; 1,2-pentanediol, 3-methyl-; 1,2-pentanediol, 4-methyl-; 1,2-hexanediol; and mixtures thereof.
- 19. The composition of Claim 18 wherein said principal solvent is selected from the group consisting of:

  1,2-butanediol, 2-ethyl-; 1,2-pentanediol, 2-methyl-; 1,2-pentanediol, 3-methyl-; 1,2-pentan
- 20. The composition of Claim 19 wherein said principal solvent is 1,2-hexanediol.

pentanediol, 4-methyl-; and 1,2-hexanediol; and mixtures thereof.

21. The composition of any of Claims 11-15 wherein said principal solvent is selected from the group consisting of: 1,3-propanediol, 2-butyl-; 1,3-propanediol, 2,2-diethyl-; 1,3-propanediol, 2-(1-methylpropyl)-; 1,3-propanediol, 2-(2-

methylpropyl)-; 1,3-propanediol, 2-methyl-2-propyl-; 1,2-butanediol, 2,3,3-trimethyl-; 1,4-butanediol, 2-ethyl-2-methyl-; 1,4-butanediol, 2-ethyl-3-methyl-; 1,4-butanediol, 2-propyl-; 1,4-butanediol, 2-isopropyl-; 1,5-pentanediol, 2,2-dimethyl-; 1,5-pentanediol, 2,3-dimethyl-; 1,5-pentanediol, 2,3-dimethyl-; 2,3-pentanediol, 2,4-dimethyl-; 2,3-pentanediol, 2,4-dimethyl-; 2,3-pentanediol, 3,4-dimethyl-; 2,3-pentanediol, 4,4-dimethyl-; 3,4-pentanediol, 2,3-dimethyl-; 1,5-pentanediol, 2-methyl-; 1,6-hexanediol, 3-methyl-; 2,3-hexanediol, 2-methyl-; 2,3-hexanediol, 4-methyl-; 2,3-hexanediol, 5-methyl-; 2,3-hexanediol, 2-methyl-; 3,4-hexanediol, 3-methyl-; 2,3-hexanediol, 5-methyl-; 3,4-hexanediol, 2-methyl-; 3,4-hexanediol, 3-methyl-; 1,3-heptanediol; 1,4-heptanediol; 1,5-heptanediol; 1,6-heptanediol; and mixtures thereof.

- 22. The composition of Claim 21 wherein said principal solvent is selected from the group consisting of:

  1,3-propanediol, 2-butyl-; 1,4-butanediol, 2-propyl-; 1,5-pentanediol, 2-ethyl-; 2,3-pentanediol, 2,3-dimethyl-; 2,3-pentanediol, 2,4-dimethyl-; 2,3-pentanediol, 3,4-dimethyl-; 2,3-pentanediol, 4,4-dimethyl-; 3,4-pentanediol, 2,3-dimethyl-; 1,6-hexanediol, 3-methyl-; 1,3-heptanediol; 1,4-heptanediol; 1,5-heptanediol; 1,6-heptanediol; and mixtures thereof.
- 23. The composition of Claim 22 wherein said principal solvent is selected from the group consisting of:

  2,3-pentanediol, 2,3-dimethyl-; 2,3-pentanediol, 2,4-dimethyl-; 2,3-pentanediol, 3,4-dimethyl-; 2,3-pentanediol, 4,4-dimethyl-; 3,4-pentanediol, 2,3-dimethyl-; and mixtures thereof.
- The composition of any of Claims 11-15 wherein said principal solvent is 24. selected from the group consisting of: 1,3-propanediol, 2-(2-methylbutyl)-; 1,3propanediol, 2-(1,1-dimethylpropyl)- 1,3-propanediol, 2-(1,2-dimethylpropyl)-; 1,3-1,3-2-(1-ethylpropyl)-; 1,3-propanediol, 2-(1-methylbutyl)-; propanediol, propanediol, 2-(2/2-dimethylpropyl)-, 1,3-propanediol, 2-(3-methylbutyl)-, 1,3-1,3-propanediol, 2-ethyl-2-isopropyl-; 2-butyl-2-methyl-; 1,3propanediol, propanediol, 2-ethyl-2-propyl-; 1,3-propanediol, 2-methyl-2-(1-methylpropyl)-; 1,3propanediol, 2-methyl-2-(2-methylpropyl)-; 1,3-propanediol, 2-tertiary-butyl-2methyl-; /1,3-butanediol, 2,2-diethyl-; 1,3-butanediol, 2-(1-methylpropyl)-; 1,3butanediol, 2-butyl-; 1,3-butanediol, 2-ethyl-2,3-dimethyl-; 1,3-butanediol, 2-(1,1dimethylethyl)-; 1,3-butanediol, 2-(2-methylpropyl)-; 1,3-butanediol, 2-methyl-2-

isopropyl-; 1,3-butanediol, 2-methyl-2-propyl-; 1,3-butanediol, 3-methyl-2-isopropyl-: 1,3-butanediol, 3-methyl-2-propyl-; 1,4-butanediol, 2,2-diethyl-; 1,4-butanediol, 2methyl-2-propyl-: 1.4-butanediol, 2-(1-methylpropyl)-: 1.4-butanediol, 2-ethyl-2,3dimethyl-; 1.4-butanediol. 2-ethyl-3,3-dimethyl-; 1.4-butanediol. 2-(1,1dimethylethyl)-; 1,4-butanediol, 2-(2-methylpropyl)-; 1,4-butanediol, 2-methyl-3propyl-; 1,4-butanediol, 3-methyl-2-isopropyl-; 1,3-pentanediol, 2,2,3-trimethyl-; 1,3-pentanediol, 2,2,4-trimethyl-; 1,3-pentanediol, 2,3,4-trimethyl-; 1,3-pentanediol, 2,4,4-trimethyl-; 1,3-pentanediol, 3,4,4-trimethyl-; 1,4-pentanediol, 2,2,3-trimethyl-; 1,4-pentanediol, 2,2,4-trimethyl-; 1,4-pentanediol, 2,3,3-trimethyl-/ 1,4-pentanediol, 2,3,4-trimethyl-; 1,4-pentanediol, 3,3,4-trimethyl-; 1,5-pentanediol, 2,2,3-trimethyl-; 1,5-pentanediol, 2,2,4-trimethyl-; 1,5-pentanediol, 2,3,3-trimethyl-; 1,5-pentanediol, 2,3,4-trimethyl-; 2,4-pentanediol, 2,3,3-trimethyl-; 2,4-pentanediol, 2,3,4-trimethyl-; 2-ethyl-2-methyl-; 1,3-pentanediol, 2-ethyl-3-methyl-; pentanediol, 2-ethyl-4-methyl-; 1,3-pentanediol, 3-ethyl-2-methyl-; 1,4-pentanediol, 2-ethyl-2-methyl-; 1,4-pentanediol, 2-ethyl-3-methyl-; 1,4-pentanediol, 2-ethyl-4methyl-; 1,4-pentanediol, 3-ethyl-2-methyl-; 1,4-pentanediol, 3-ethyl-3-methyl-; 1,5pentanediol, 2-ethyl-2-methyl-; 1,5-pentanediol, 2-ethyl-3-methyl-; 1,5-pentanediol, 2-ethyl-4-methyl-; 1,5-pentanediol, 3-ethyl-3-methyl-; 2,4-pentanediol, 3-ethyl-2methyl-, 1,3-pentanediol, 2-isopropyl-; 1,3-pentanediol, 2-propyl-; 1,4-pentanediol, 2-isopropyl-; 1,4-pentanediol, 2-propyl-; 1,4-pentanediol, 3-isopropyl-; 1,5pentanediol, 2-isopropyl-; 2,4-pentanediol, 3/propyl-; 1,3-hexanediol, 2,2-dimethyl-; 1,3-hexanediol, 2,3-dimethyl-; 1,3-hexanediol, 2,4-dimethyl-; 1,3-hexanediol, 2,5-3,4-dimethyl-; 1,3-hexanediol, 3,5-dimethyl-; 1.3dimethyl-; 1,3-hexanediol, 1,3-hexanediol. 4.5-dimethyl-; 1.4-hexanediol, 2,2hexanediol, 4,4-dimethyl-; 1.4-hexanediol. 2,4-dimethyl-; 1,4-1,4-hexanediol, 2.3-dimethyl-: dimethyl-; 1,4-hexanediol, 3,3-dimethyl-; 1,4-hexanediol, 3,4hexanediol, 2,5-dimethyl-; 4.5-dimethyl-; 1,4-3.5-dimethyl-: 1.4-hexanediol, dimethyl-; 1.4-hexanediol. 1.5-hexanediol. 2,2-dimethyl-; 1.5-hexanediol, 2.3hexanediol, 5,5-dimethyl-; 2,5-dimethyl-; 1.5-2,4-dimethyl-; 1.5-hexanediol. dimethyl-; 1.5-hexanediol, 1.5-hexanediol, 3.5-1.5-hexanediol. 3.4-dimethyl-; hexanediol, 3,3-dimethyl-; 2,2-dimethyl-; 1.6-4.5-dimethyl-; 1,6-hexanediol, dimethyl-; 1,5-hexanediol, 1,6-hexanediol, 2.5-1,6-hexanediol, 2,4-dimethyl-; hexanediol, 2,3-dimethyl-; 3,4-dimethyl-; 2.4dimethyl-; 1.6-hexanediol, 3,3-dimethyl-; 1.6-hexanediol, 2,4-hexanediol, 2,5-2,4-hexanediol, 2.4-dimethyl-; hexanediol. 2,3-dimethyl-/ 3.4-dimethyl-; 2,4-hexanediol, 2.4-2.4-hexanediol, 3,3-dimethyl-; dimethyl-: 2,4-hexanediol, 5,5-4.5-dimethyl-; hexanediol. 3.5-dimethyl-: 2.4-hexanediol. 2,4-dimethyl-; 2,5dimethyl-; 2,5-hexanediol, 2,3-dimethyl-; 2.5-hexanediol,

hexanediol, 2,5-dimethyl-; 2,5-hexanediol, 3,3-dimethyl-; 2,5-hexanediol, 3,4dimethyl-; 2,6-hexanediol, 3,3-dimethyl-; 1,3-hexanediol, 2-ethyl-; 1,3-hexanediol, 4ethyl-, 1,4-hexanediol, 2-ethyl-, 1,4-hexanediol, 4-ethyl-, 1,5-hexanediol, 2-ethyl-, 2,4-hexanediol, 3-ethyl-, 2,4-hexanediol, 4-ethyl-; 2,5-hexanediol/3-ethyl-; 1,3heptanediol, 2-methyl-, 1,3-heptanediol, 3-methyl-, 1,3-heptanediol, 4-methyl-, 1,3heptanediol, 5-methyl-; 1,3-heptanediol, 6-methyl-; 1,4-heptanediol, 2-methyl-; 1,4heptanediol, 3-methyl-; 1,4-heptanediol, 4-methyl-; 1,4-heptanediol, 5-methyl-; 1,4heptanediol, 6-methyl-; 1,5-heptanediol, 2-methyl-; 1,5-heptanediol, 3-methyl-; 1,5heptanediol, 4-methyl-; 1,5-heptanediol, 5-methyl-; 1,5-heptanediol, 6-methyl-; 1,6heptanediol, 2-methyl-; 1,6-heptanediol, 3-methyl-; 1,6-heptanediol, 4-methyl-; 1,6heptanediol, 5-methyl-; 1,6-heptanediol, 6-methyl-; 2,4-heptanediol, 2-methyl-; 2,4heptanediol, 3-methyl-; 2,4-heptanediol, 4-methyl-; 2,4-heptanediol, 5-methyl-; 2,4heptanediol, 6-methyl-; 2,5-heptanediol, 2-methyl-; 2,5-heptanediol, 3-methyl-; 2,5heptanediol, 4-methyl-; 2,5-heptanediol, 5-methyl-; 2,5-heptanediol, 6-methyl-; 2,6heptanediol, 2-methyl-; 2,6-heptanediol, 3-methyl-; 2,6-heptanediol, 4-methyl-; 3,4heptanediol, 3-methyl-; 3,5-heptanediol, 2-methyl-; 3,5-heptanediol, 3-methyl-; 3,5heptanediol, 4-methyl-; 2,4-octanediol; 2,5-octanediol; 2,6-octanediol; 2,7octanediol; 3,5-octanediol; 3,6-octanediol; and mixtures thereof.

The composition of Claim 24 wherein said principal solvent is selected from 25. the group consisting of: 1,3-propanediol, 2-(1,1-dimethylpropyl)-; 1,3-propanediol, 2-(1,2-dimethylpropyl)-; 1,3-propanediol, 2-(1-ethylpropyl)-; 1,3-propanediol, 2-(2,2-dimethylpropyl)-; 1,3-propanediol, 2-ethyl-2-isopropyl-; 1,3-propanediol, 2methyl-2-(1-methylpropyl)-; 1,3-propanediol, 2-methyl-2-(2-methylpropyl)-; 1,3propanediol, 2-tertiary-butyl-2-methyl-; 1,3-butanediol, 2,2-diethyl; 1,3-butanediol, 2-(1-methylpropyl)-; 1,3-butanediol, 2-butyl-; 1,3-butanediol, 2-ethyl-2,3-dimethyl-, 1,3-butanediol, 2-(1,1-dimethylethyl)-; 1,3-butanediol, 2-(2-methylpropyl)-, 1,3-2-methyl-2-propyl-, 1,3-butanediol, 2-methyl-2-isopropyl-, 1.3butanediol, 3-methyl-2-propyl-; 1,4-butanediol, 2,2-diethyl-; 1,4-butanediol, 2-ethyl-1,4-butanediol, 2-ethyl-3,3-dimethyl-; 1,4-butanediol, 2-(1,1-2,3-dimethyl-; dimethylethyl)-/ 1,4-butanediol, 3-methyl-2-isopropyl-; 1,3-pentanediol, 2,2,3trimethyl-; 1/3-pentanediol, 2,2,4-trimethyl-; 1,3-pentanediol, 2,3,4-trimethyl-; 1,3pentanedial, 2.4.4-trimethyl-; 1.3-pentanedial, 3.4.4-trimethyl-, 1.4-pentanedial, 2,2,3-trimethyl-; 1,4-pentanediol, 2,2,4-trimethyl-; 1,4-pentanediol, 2,3,3-trimethyl-, 1.4-pentanediol, 2,3,4-trimethyl-; 1,4-pentanediol, 3,3,4-trimethyl-; 1,5-pentanediol, 2,2,3-trimethyl-; 1,5-pentanediol, 2,2,4-trimethyl-; 1,5-pentanediol, 2,3,3-trimethyl-; 2,3,4-trimethyl-, 1,3-pentanediol, 2-ethyl-2-methyl-, 2,4-pentanediol,

pentanediol, 2-ethyl-3-methyl-, 1,3-pentanediol, 2-ethyl-4-methyl-, 1,3-pentanediol, 3-ethyl-2-methyl-, 1,4-pentanediol, 2-ethyl-2-methyl-, 1,4-pentanediol, 2-ethyl-3methyl-; 1,4-pentanediol, 2-ethyl-4-methyl-; 1,5-pentanediol, 3-ethyl-3-methyl-; 2,4pentanediol, 3-ethyl-2-methyl-; 1,3-pentanediol, 2-isopropyl-; 1,3-pentanediol, 2propyl-; 1,4-pentanediol, 2-isopropyl-; 1,4-pentanediol, 2-propyl-; 1,4-pentanediol, 3-isopropyl-; 2,4-pentanediol, 3-propyl-: 1.3-hexanediol. 2.2-dimethyl-: 1.3hexanediol, 2,3-dimethyl-; 1,3-hexanediol, 2,4-dimethyl-; 1,3-hexanediol, 2.5-1,3-hexanediol, 3,4-dimethyl-; dimethyl-; 1,3-hexanediol, 3,5-dimethyl-; 1,3hexanediol, 4,4-dimethyl-; 1,3-hexanediol, 4,5-dimethyl-; 1,4-hexanediol, 2.2dimethyl-; 1,4-hexanediol, 2,3-dimethyl-; 1,4-hexanediol, 2,4-dimethyl-; 1.4hexanediol, 2,5-dimethyl-; 1,4-hexanediol, 3,3-dimethyl-; 1,4-hexanediol, 3,4dimethyl-; 1,4-hexanediol, 3,5-dimethyl-; 1.4-hexanediol, 4.5-dimethyl-; 1,4hexanediol, 5,5-dimethyl-; 1,5-hexanediol, 2,2-dimethyl-; 1,5-hexanediol, 2,3dimethyl-; 1,5-hexanediol, 2,4-dimethyl-; 1,5-hexanediol, 2,5-dimethyl-; 1,5hexanediol, 3,3-dimethyl-; 1,5-hexanediol, 3,4-dimethyl-; 1,5-hexanediol, 3,5dimethyl-; 1,5-hexanediol, 4,5-dimethyl-; 2.6-hexanediol, 3.3-dimethyl-; 1,3hexanediol, 2-ethyl-; 1,3-hexanediol, 4-ethyl-, 1,4-hexanediol, 2-ethyl-; 1,4hexanediol, 4-ethyl-; 1,5-hexanediol, 2-ethyl-; 2,4-hexanediol, 3-ethyl-; 2,4hexanediol, 4-ethyl-; 2,5-hexanediol, 3-ethyl-; 1,3-heptanediol, 2-methyl-; 1,3heptanediol, 3-methyl-; 1,3-heptanediol, 4-methyl-; 1,3-heptanediol, 5-methyl-; 1,3heptanediol, 6-methyl-; 1,4-heptanediol, 2-methyl-; 1,4-heptanediol, 3-methyl-; 1,4heptanediol, 4-methyl-; 1,4-heptanediol, 5-methyl-; 1,4-heptanediol, 6-methyl-; 1,5heptanediol, 2-methyl-; 1,5-heptanediol,/3-methyl-; 1,5-heptanediol, 4-methyl-; 1,5heptanediol, 5-methyl-; 1,5-heptanediol, 6-methyl-; 1,6-heptanediol, 2-methyl-, 1,6heptanediol, 3-methyl-; 1,6-heptanediol, 4-methyl-; 1,6-heptanediol, 5-methyl-; 1,6heptanediol, 6-methyl-; 2,4-heptanediol, 2-methyl-; 2,4-heptanediol, 3-methyl-; 2,4heptanediol, 4-methyl-; 2,4-heptanediol, 5-methyl-; 2,4-heptanediol, 6-methyl-; 2,5heptanediol, 2-methyl-; 2,5-heptanediol, 3-methyl-; 2,5-heptanediol, 4-methyl-, 2,5heptanediol, 5-methyl-; 2,5-heptanediol, 6-methyl-; 2,6-heptanediol, 2-methyl-; 2,6heptanediol, 3-methyl-, 2,6-heptanediol, 4-methyl-, 3,4-heptanediol, 3-methyl-, 3,5heptanediol, 2-methyl-; 3,5-heptanediol, 4-methyl-; 2,4-octanediol; 2,5-octanediol; 2,6-octanediol; 2,7-octanediol; 3,5-octanediol; 3,6-octanediol; and mixtures thereof.

26. The composition of Claim 25 wherein said principal solvent is selected from the group consisting of:

1,3-propanediol, 2-(1,1-dimethylpropyl)-; 1,3-propanediol, 2-(1,2-dimethylpropyl)-; 1,3-propanediol, 2-(2,2-dimethylpropyl)-; 1,3-propanediol, 2-(2,2-dimethylpropyl)-; 1,3-

propanediol, 2-ethyl-2-isopropyl-; 1,3-propanediol, 2-methyl-2-(1-methylpropyl)-; 1,3-propanediol, 2-methyl-2-(2-methylpropyl)-; 1,3-propanediol, 2-ternary-butyl-2methyl-; 1,3-butanediol, 2-(1-methylpropyl)-; 1,3-butanediol, 2-(2-methylpropyl)-; 1,3-butanediol, 2-butyl-, 1,3-butanediol, 2-methyl-2-propyl-, 1,3-butanediol, 3methyl-2-propyl-; 1,4-butanediol, 2,2-diethyl-; 1,4-butanediol, 2-ethyl-2,3-dimethyl-; 1,4-butanediol, 2-ethyl-3,3-dimethyl-; 1,4-butanediol, 2-(1,1-dimethylethyl)-. 1,3pentanediol, 2,3,4-trimethyl-; 1,4-pentanediol, 2,3,4-trimethyl-; 1,5-pentanediol, 2,2,3-trimethyl-; 1,5-pentanediol, 2,2,4-trimethyl-; 1,5-pentanediol, 2,3,3-trimethyl-; 1,3-pentanediol, 2-ethyl-2-methyl-; 1,3-pentanediol, /2-ethyl-3-methyl-; pentanediol, 2-ethyl-4-methyl-; 1,3-pentanediol, 3-ethyl-2-methyl-; 1,4-pentanediol, 2-ethyl-2-methyl-; 1,4-pentanediol, 2-ethyl-3-methyl-, 1,4-pentanediol, 2-ethyl-4methyl-; 1,5-pentanediol, 3-ethyl-3-methyl-; 2,4-pentanediol, 3-ethyl-2-methyl-; 1,3pentanediol, 2-isopropyl-; 1,3-pentanediol, 2-propyl-; 1,4-pentanediol, 2-isopropyl-; 1,4-pentanediol, 2-propyl-; 1,4-pentanediol, 3-isopropyl-; 2,4-pentanediol, 3-propyl-; 1,3-hexanediol, 2,2-dimethyl-; 1,3-hexanediol, 2,3-dimethyl-; 1,3-hexanediol, 2,4dimethyl-; 1,3-hexanediol, 2,5-dimethyl-/ 1,3-hexanediol, 3.4-dimethyl-; 1.3hexanediol, 3,5-dimethyl-; 1.3-hexanediol 4,4-dimethyl-; 1,3-hexanediol, 4,5dimethyl-; 1,4-hexanediol, 2,2-dimethyl-; 1,4-hexanediol, 2,3-dimethyl-; 1,4hexanediol, 2,4-dimethyl-; 1,4-hexanediol, 2,5-dimethyl-; 1,4-hexanediol, 3,3dimethyl-; 1,4-hexanediol, 3,4-dimethyl-; 1,4-hexanediol, 3,5-dimethyl-; 1,4hexanediol, 4,5-dimethyl-; 1,4-hexanediol, 5,5-dimethyl-; 1,5-hexanediol, 2,2dimethyl-; 2/3-dimethyl-; 1,5-hexanediol, 2,4-dir ethyl-; 1,5-1,5-hexanediol, 1,5-hexanediol, 3,3-dimethyl-; 1,5-hexanediol, 3,4hexanediol, 2,5-dimethyl-; 1.5-hexanediol 3.5-dimethyl-: 1.5-hexanediol, 4.5-dimethyl-: 2.6dimethyl-; hexanediol, 3,3-dimethyl-, 1,3-hexanediol, 2-ethyl-, 1,3-hexanediol, 4-ethyl-, 1,4hexanediol, 2-ethyl-; /1,4-hexanediol, 4-ethyl-; 1,5-hexanediol, 2-ethyl-; 2,4hexanediol, 3-ethyl-/ 2,4-hexanediol, 4-ethyl-; 2,5-hexanediol, 3-ethyl-; 1,3heptanediol, 2-methyl-; 1,3-heptanediol, 3-methyl-; 1,3-heptanediol, 4-methyl-, 1,3heptanediol, 5-methyl-; 1,3-heptanediol, 6-methyl-; 1,4-heptanediol, 2-methyl-; 1,4heptanediol, 3-methyl-, 1,4-heptanediol, 4-methyl-, 1,4-heptanediol, 5-methyl-, 1,4heptanediol, 6-methyl-; 1,5-heptanediol, 2-methyl-; 1,5-heptanediol, 3-methyl-; 1,5heptanediol, 4-methyl-; 1,5-heptanediol, 5-methyl-; 1,5-heptanediol, 6-methyl-; 1,6heptanediol, 2-methyl-; 1,6-heptanediol, 3-methyl-; 1,6-heptanediol, 4-methyl-; 1,6heptanediol, 5-methyl-; 1,6-heptanediol, 6-methyl-; 2,4-heptanediol, 2-methyl-; 2,4heptanediol, 3-methyl-; 2,4-heptanediol, 4-methyl-; 2,4-heptanediol, 5-methyl-; 2,4heptanediol, 6-methyl-; 2,5-heptanediol, 2-methyl-; 2,5-heptanediol, 3-methyl-; 2,5heptanediol, 4-methyl-; 2,5-heptanediol, 5-methyl-; 2,5-heptanediol, 6-methyl-; 2,6heptanediol, 2-methyl-; 2,6-heptanediol, 3-methyl-; 2,6-heptanediol, 4-methyl-; 3,4-heptanediol, 3-methyl-; 3,5-heptanediol, 2-methyl-; 3,5-heptanediol, 4-methyl-; 2,4-octanediol; 2,5-octanediol; 2,6-octanediol; 2,7-octanediol; 3,5-octanediol; and mixtures thereof.

- The composition of Claim 26 wherein said principal solvent is selected from the group consisting of: 2,4-pentanediol, 2,3,3,4-tetramethyl-; 2,4-pentanediol, 3-tertiarybutyl-; 2,4-hexanediol, 2,5,5-trimethyl-; 2,4-hexanediol, 3,3,5-trimethyl-; 2,4-hexanediol, 3,5,5-trimethyl-; 2,4-hexanediol, 4,5,5-trimethyl-; 2,5-hexanediol, 3,3,4-trimethyl-; 2,5-hexanediol, 3,3,5-trimethyl-; and mixtures thereof.
- 28. The composition of Claim 27 wherein said principal solvent is 2,4-pentanediol, 2,3,3,4-tetramethyl-.
- 29. The composition of any of Claims 11-15 wherein said principal solvent is selected from the group consisting of: 1,2-propanediol, 3-(n-pentyloxy)-; 1,2propanediol, 3-(2-pentyloxy)-; 1,2-propanediol, 3-(3-pentyloxy)-; 1,2-propanediol, 3-(2-methyl-1-butyloxy)-; 1,2-propanediol, 3-(iso-amyloxy)-; 1,2-propanediol, 3-(3methyl-2-butyloxy)-; 1,2-propanediol, 3-(cyclohexyloxy)-; 1,2-propanediol, 3-(1cyclohex-1-envloxy)-; 1,3-propanediol, 2-(pentyloxy)-; 1,3-propanediol, 2-(2pentyloxy)-; 1,3-propanediol, 2-(3-pentyloxy)-; 1,3-propanediol, 2-(2-methyl-1butyloxy)-; 1,3-propanediol, 2-(iso-amyloxy)-; 1,3-propanediol, 2-(3-methyl-2butyloxy)-; 1,3-propanediol, 2-(cyclohexyloxy)-; 1,3-propanediol, 2-(1-cyclohex-1enyloxy)-; 1,2-propanediol, 3-(butyloxy)-, triethoxylated; 1,2-propanediol, 3-(butyloxy)-, tetraethoxylated, 1,2-propanediol, 3-(butyloxy)-, pentaethoxylated, 1,2propanediol, 3-(butyloxy)-, hexaethoxylated; 1,2-propanediol, 3-(butyloxy)-, heptaethoxylated; 1,2-propanediol, 3-(butyloxy)-, octaethoxylated; 1,2-propanediol, 3-(butyloxy)-, nonaethoxylated; 1,2-propanediol, 3-phenyloxy-; 1,2-propanediol, 3benzyloxy-; 1,2-propanediol, 3-(2-phenylethyloxy)-; 1,2-propanediol, 3-(1-phenyl-2propanyloxy)-; 1,3-propanediol, 2-phenyloxy-; 1,3-propanediol, 2-(m-cresyloxy)-; 1,3-propanediol, 2-(p-cresyloxy)-; 1,3-propanediol, 2-benzyloxy-; 1,3-propanediol, 1.3-propanediol, 2-(1-phenylethyloxy)-; bis(2-2-(2-phenylethyloxy)-: hydroxybutyl)ether, bis(2-hydroxycylclopentyl)ether, and mixtures thereof.
- 30. The composition of Claim 29 wherein said principal solvent is selected from the group consisting of:

1,2-propanediol. 3-(n-pentyloxy)-; 1,2-propanediol, 3-(2-pentyloxy)propanediol, 3-(3-pentyloxy)-; 1,2-propanediol, 3-(2-methyl-1-butyloxy)-; 1.2propanediol, 3-(iso-amyloxy)-; 1,2-propanediol, 3-(3-methyl-2-butyloxy)-; propanediol, 3-(cyclohexyloxy)-; 1,2-propanediol, 3-(1-cyclohex-1-enyloxy)-; 1,3propanediol, 2-(pentyloxy)-; 1,3-propanediol, 2-(2-pentyloxy)-; 1,3-propanediol, 2-(3-pentyloxy)-; 1,3-propanediol, 2-(2-methyl-1-butyloxy)-; 1,3-propanediol, 2-(iso-1,3-propanediol, 2-(3-methyl-2-butyloxy)-; 1,3-propanediol, (cyclohexyloxy)-; 1,3-propanediol, 2-(1-cyclohex-1-enyloxy)-; 1,2-propanediol, 3-(butyloxy)-, pentaethoxylated; 1,2-propanediol, 3-(butyloxy)-, hexaethoxylated; 1,2propanediol, 3-(butyloxy)-, heptaethoxylated; 1,2-propanediol, 3-(butyloxy)-, octaethoxylated; 1,2-propanediol, 3-(butyloxy)-, nonaethoxylated; 1,2-propanediol, 3-phenyloxy-; 1,2-propanediol, 3-benzyloxy-; 1,2-propanediol, 3-(2-phenylethyloxy)-; 1,3-propanediol, 2-(m-cresyloxy)-; 1,3-propanediol, 2-(p-cresyloxy)-; 1,3propanediol. 2-benzyloxy-; 1,3-propanediol. 2/(2-phenylethyloxy)-; bis(2hydroxybutyl)ether; bis(2-hydroxycylclopentyl)ether/and mixtures thereof.

31. The composition of Claim 30 wherein said principal solvent is selected from the group consisting of:

1,2-propanediol, 3-(n-pentyloxy)-; 1,2-propanediol, 3-(2-pentyloxy)-; 1.2propanediol, 3-(3-pentyloxy)-; 1,2-propanediol, 3-(2-methyl-1-butyloxy)-; 1,2propanediol, 3-(iso-amyloxy)-; 1,2-propanediol, 3-(3-methyl-2-butyloxy)-; 1,2propanediol, 3-(cyclohexyloxy)-; 1,2-propanediol, 3-(1-cyclohex-1-enyloxy)-; 1,3propanediol, 2-(pentyloxy)-; 1,3-propanediol, 2-(2-pentyloxy)-; 1,3-propanediol, 2-(3-pentyloxy)-; 1,3-propanediol, 2-(2-methyl-1-butyloxy)-; 1,3-propanediol, 2-(iso-1,3-propanediol, 2-(3-methyl-2-butyloxy)-; 1,3-propanediol, amyloxy)-; (cyclohexyloxy)-; 1,3-propanediol, 2-(1-cyclohex-1-enyloxy)-; 1,2-propanediol, 3-(butyloxy)-, pentaethoxylated; 1,2-propanediol, 3-(butyloxy)-, hexaethoxylated; 1,2propanediol, 3-(butyloxy)-, heptaethoxylated; 1,2-propanediol, 3-(butyloxy)-, octaethoxylated; 1/2-propanediol, 3-(butyloxy)-, nonaethoxylated; 1,2-propanediol, 3-phenyloxy-; 1,2-propanediol, 3-benzyloxy-; 1,2-propanediol, 3-(2-phenylethyloxy)-; 1,3-propanediol, 2-(m-cresyloxy)-; 1,3-propanediol, 2-(p-cresyloxy)-; 1,3propanediol. bis(2-hydroxybutyl)ether; bis(2-2-(2-phenylethyloxy)-; hydroxycylclopentyl)ether, and mixtures thereof.

The composition of any of Claims 11-15 wherein said principal solvent is selected from the group consisting of: 1-isopropyl-1,2-cyclobutanediol; 3-ethyl-4-methyl-1,2-cyclobutanediol; 3-propyl-1,2-cyclobutanediol; 3-isopropyl-1,2-

cyclobutanediol; 1-ethyl-1,2-cyclopentanediol; 1,2-dimethyl-1,2-cyclopentanediol; 1,4-dimethyl-1,2-cyclopentanediol; 2.4.5-trimethyl-1,3-cyclopentanediol; dimethyl-1,2-cyclopentanediol; 3,4-dimethyl-1,2-cyclopentanediol; 3,5-dimethyl-1,2cyclopentanediol; 3-ethyl-1,2-cyclopentanediol; 4,4-dimethyl-1,2-cyclopentanediol; 4-ethyl-1,2-cyclopentanediol: 1, 1-bis(hydroxymethyl)cyclohexane: 1,2bis(hydroxymethyl)cyclohexane; 1,2-dimethyl-1,3-cyclohexanediol/ 1.3bis(hydroxymethyl)cyclohexane; 1,3-dimethyl-1,3-cyclohexanediol; 1,6/dimethyl-1,3cyclohexanediol; 1-hydroxy-cyclohexaneethanol; 1-hydroxy-cyclohexanemethanol; 1ethyl-1,3-cyclohexanediol: 1-methyl-1,2-cyclohexanediol; 2,2-dimethyl-1,3cyclohexanediol; 2,3-dimethyl-1,4-cyclohexanediol; 2,4-dimethyl-1,3cyclohexanediol; 2,5-dimethyl-1,3-cyclohexanediol: 2,6-dimethyl-1,4cyclohexanediol; 2-ethyl-1,3-cyclohexanediol; 2-hydroxycyclohexaneethanol; 2hydroxyethyl-1-cyclohexanol; 2-hydroxymethylcyclohexanol; 3-hydroxyethyl-1cyclohexanol; 3-hydroxycyclohexaneethanol; 3-hydroxymethylcyclohexanol; 3methyl-1,2-cyclohexanediol; 4,4-dimethyl-1,3-cyclohexanediol; 4.5-dimethyl-1.3cyclohexanediol; 4,6-dimethyl-1,3-cyclohexanediol; 4-ethyl-1,3-cyclohexanediol; 4hydroxyethyl-1-cyclohexanol: 4-hydroxymethylcyclohexanol; 4-methyl-1.2cyclohexanediol; 5,5-dimethyl-1,3-cyclohexanediol; 5-ethyl-1,3-cyclohexanediol; 1,2cycloheptanediol; 2-methyl-1,3-cycloheptanediol; 2-methyl-1,4-cycloheptanediol; 4methyl-1,3-cycloheptanediol; 5-methyl-1,3-cycloheptanediol; 5-methyl-1,4cycloheptanediol; 6-methyl-1,4-cycloheptanediol; 1,3-cyclooctanediol; 1.4cyclooctanediol; 1,5-cyclooctanediol; 1,2-cyclohexanediol, diethoxylate; 1,2cyclohexanediol, triethoxylate; 1,2-cyclohexanediol. tetraethoxylate; 1,2cyclohexanediol, pentaethoxylate; 1,2-cyclohexanediol, hexaethoxylate; 1,2cyclohexanediol. heptaethoxylate; 1,2-cyclohexanediol, octaethoxylate, 1,2nonaethoxylate; 1,2-cyclohexanediol, monopropoxylate, 1,2cyclohexanediol, cyclohexanediol, monobutylenoxylate, 1,2-cyclohexanediol, dibutylenoxylate, 1,2cyclohexanediol. tributylenoxylate, 1,2-cyclobutanediol, 1-ethenyl-2-ethyl-, 3cyclobutene-1,2-diol, 1,2,3,4-tetra/methyl-; 3-cyclobutene-1,2-diol, 3,4-diethyl-; 3cyclobutene-1,2-diol, 3-(1,1-dimethylethyl)-; 3-cyclobutene-1,2-diol, 3-butyl-; 1,2-1,2-dimethyl-4-methylene-; 1,2-cyclopentanediol, cyclopentanediol, 1-ethyl-3methylene-; 1,2-cyclopentanediol, 4-(1-propenyl); 3-cyclopentene-1,2-diol, 1-ethyl-3-1-ethenyl-; 1,2-cyclohexanediol, methyl-: 1,2-cyclohexanediol, methylene-; 1,2-cyclohexanediol, 1-methyl-4-methylene-; 1,2-cyclohexanediol, 3ethenyl-; 1,2-cyclohexanediol, 4-ethenyl-; 3-cyclohexene-1,2-diol, 2,6-dimethyl-; 3cyclohexene-1,2-diol, 6,6-dimethyl-; 4-cyclohexene-1,2-diol, 3,6-dimethyl-; 4- 234 -

cyclohexene-1,2-diol, 4,5-dimethyl-; 3-cyclooctene-1,2-diol; 4-cyclooctene-1,2-diol; 5-cyclooctene-1,2-diol; and mixtures thereof.

33. The composition of Claim 32 wherein said principal solvent is selected from the group consisting of:

1-isopropyl-1,2-cyclobutanediol; 3-ethyl-4-methyl-1,2-cyclobutanediol; 3-propyl-1,2cyclobutanediol; 3-isopropyl-1,2-cyclobutanediol; 1-ethyl-1,2-cyclopentanediol; 1,2dimethyl-1,2-cyclopentanediol, 1,4-dimethyl-1,2-cyclopentanediol, 3,3-dimethyl-1,2cyclopentanediol; 3,4-dimethyl-1,2-cyclopentanediol; 3,5-dimethyl-1,2cyclopentanediol; 3-ethyl-1,2-cyclopentanediol; 4,4-dimethyl-1,2-cyclopentanediol; 4-ethyl-1,2-cyclopentanediol; 1,1-bis(hydroxymethyl)cyclohexane; 1,2-1,2-dimethyl-1,3-cyclohexanediol; bis(hydroxymethyl)cyclohexane; 1,3bis(hydroxymethyl)cyclohexane; 1-hydroxy-cyclohexanemethanol; 1-methyl-1,2cyclohexanediol; 3-hydroxymethylcyclohexanol; 3-methyl-1,2-cyclohexanediol; 4,4dimethyl-1,3-cyclohexanediol; 4,5-dimethyl-1,3-cyclohexanediol; 4,6-dimethyl-1,3cyclohexanediol; 4-ethyl-1,3-cyclohexanediol; 4/hydroxyethyl-1-cyclohexanol; 4hydroxymethylcyclohexanol; 4-methyl-1,2-cyclohexanediol; 1,2-cycloheptanediol; ; 1,2-cyclohexanediol, pentaethoxylate; 1,2-cyclohexanediol, hexaethoxylate; 1,2cyclohexanediol. 1,2-cyclohexanediol, octaethoxylate; heptaethoxylate; cyclohexanediol, nonaethoxylate, 1,2-gyclohexanediol, monopropoxylate, 1,2cyclohexanediol, dibutylenoxylate; and mixtures thereof.

- 34. The composition of any of Claims 11-15 wherein said principal solvent is selected from the group consisting of:
- 1. 1,2-propanediol (C3) 2(Me-E<sub>1-4</sub>); 1,2-propanediol (C3) PO<sub>4</sub>; 1,2-propanediol, 2-methyl- (C4) (Me-E<sub>4-10</sub>); 1,2-propanediol, 2-methyl- (C4) 2(Me-E<sub>1</sub>); 1,2-propanediol, 2-methyl- (C4) PO<sub>3</sub>; 1,2-propanediol, 2-methyl- (C4) BO<sub>1</sub>, 1,3-propanediol (C3) 2(Me-E<sub>6-8</sub>); 1,3-propanediol (C3) PO<sub>5-6</sub>; 1,3-propanediol, 2,2-diethyl- (C7) E<sub>1-7</sub>; 1,3-propanediol, 2,2-diethyl- (C7) PO<sub>1</sub>; 1,3-propanediol, 2,2-dimethyl- (C5) 2(Me E<sub>1-2</sub>); 1,3-propanediol, 2,2-dimethyl- (C5) 2(Me E<sub>1-2</sub>); 1,3-propanediol, 2-(1-methylpropyl)- (C7) E<sub>1-7</sub>; 1,3-propanediol, 2-(1-methylpropyl)- (C7) PO<sub>1</sub>; 1,3-propanediol, 2-(1-methylpropyl)- (C7) PO<sub>1</sub>; 1,3-propanediol, 2-(2-methylpropyl)- (C7) n-BO<sub>1-2</sub>; 1,3-propanediol, 2-(2-methylpropyl)- (C7) n-BO<sub>1-2</sub>; 1,3-propanediol, 2-ethyl- (C5) 2(Me E<sub>1</sub>); 1,3-propanediol, 2-ethyl- (C5) PO<sub>3</sub>; 1,3-propanediol, 2-ethyl-2-methyl- (C6) (Me E<sub>1-6</sub>); 1,3-propanediol, 2-ethyl-2-methyl- (C6) PO<sub>2</sub>; 1,3-propanediol, 2-ethyl-2-methyl-2

propanediol, 2-ethyl-2-methyl- (C6) BO<sub>1</sub>; 1,3-propanediol, 2-isopropyl- (C6) (Me E<sub>1-6</sub>); 1,3-propanediol, 2-isopropyl- (C6) PO<sub>2</sub>; 1,3-propanediol, 2-isopropyl- (C6) BO<sub>1</sub>; 1,3-propanediol, 2-methyl- (C4) 2(Me E<sub>2-5</sub>); 1,3-propanediol, 2-methyl- (C4) PO<sub>4-5</sub>; 1,3-propanediol, 2-methyl- (C4) BO<sub>2</sub>; 1,3-propanediol, 2-methyl-2-isopropyl- (C7) E<sub>2-9</sub>; 1,3-propanediol, 2-methyl-2-isopropyl- (C7) PO<sub>1</sub>; 1,3-propanediol, 2-methyl-2-propyl- (C7) E<sub>1-7</sub>; 1,3-propanediol, 2-methyl-2-propyl- (C7) PO<sub>1</sub>; 1,3-propanediol, 2-methyl-2-propyl- (C7) n-BO<sub>1-2</sub>; 1,3-propanediol, 2-propyl- (C6) (Me E<sub>1-4</sub>); 1,3-propanediol, 2-propyl- (C6) PO<sub>2</sub>; 1,3-propanediol, 2-propyl- (C6) BO<sub>2</sub>;

1,2-butanediol (C4) (Me E<sub>2-8</sub>); 1,2-butanediol (C4) PO<sub>2-3</sub>; 1,2butanediol (C4) BO<sub>1</sub>; 1,2-butanediol, 2,3-dimethyl- (C6) E<sub>1-6</sub>; 1,2-butanediol, 2,3dimethyl- (C6) n-BO<sub>1-2</sub>; 1,2-butanediol, 2-ethyl- (C6) E<sub>1-3</sub>; 1,2-butanediol, 2-ethyl-(C6) n-BO<sub>1</sub>; 1,2-butanediol, 2-methyl- (C5) (Me E<sub>1-2</sub>); 1,2-butanediol, 2-methyl-(C5) PO<sub>1</sub>; 1,2-butanediol, 3,3-dimethyl- (C6) E<sub>1-6</sub>; 1,2-butanediol, 3,3-dimethyl-(C6) n-BO<sub>1-2</sub>; 1,2-butanediol, 3-methyl- (C5) (Me  $E_{1-2}$ ); 1,2-butanediol, 3-methyl-(C5) PO<sub>1</sub>; 1,3-butanediol (C4) 2(Me E<sub>3-6</sub>); 1,3-butanediol (C4) PO<sub>5</sub>; 1,3-butanediol (C4) BO<sub>2</sub>, 1,3-butanediol, 2,2,3-trimethyl- (C7) (Me E<sub>1-3</sub>); 1,3-butanediol, 2,2,3trimethyl- (C7) PO<sub>1-2</sub>; 1,3-butanediol, 2,2-dimethyl- (C6) (Me E<sub>3-8</sub>); 1,3butanediol, 2,2-dimethyl- (C6) PO<sub>3</sub>; 1,3-butanediol, 2,3-dimethyl- (C6) (Me E<sub>3-8</sub>); 1,3-butanediol, 2,3-dimethyl- (C6) PO<sub>3</sub>, 1,3-butanediol, 2-ethyl- (C6) (Me E<sub>1-6</sub>); 1,3-butanediol, 2-ethyl- (C6) PO<sub>2-3</sub>; 1,3-butanediol, 2-ethyl- (C6) BO<sub>1</sub>; 1,3butanediol, 2-ethyl-2-methyl- (C7) (Me E<sub>1</sub>); 1,3-butanediol, 2-ethyl-2-methyl- (C7) PO<sub>1</sub>; 1,3-butanediol, 2-ethyl-2-methyl- (C7) /n-BO<sub>2-4</sub>; 1,3-butanediol, 2-ethyl-3methyl- (C7) (Me E1); 1,3-butanediol, 2-ethyl-3-methyl- (C7) PO1; 1,3-butanediol, 2-ethyl-3-methyl- (C7) n-BO<sub>2-4</sub>; 1,3-butanediol, 2-isopropyl- (C7) (Me E<sub>1</sub>); 1,3butanediol, 2-isopropyl- (C7) PO<sub>1</sub>, 1,3-butanediol, 2-isopropyl- (C7) n-BO<sub>2-4</sub>, 1,3butanediol, 2-methyl- (C5) 2(Me E<sub>1-3</sub>); 1,3-butanediol, 2-methyl- (C5) PO<sub>4</sub>; 1,3butanediol, 2-propyl- (C7) E<sub>2-9</sub>; 1,3-butanediol, 2-propyl- (C7) PO<sub>1</sub>; 1,3-butanediol, 2-propyl- (C7) n-BO<sub>1-3</sub>; 1,3-butanediol, 3-methyl- (C5) 2(Me E<sub>1-3</sub>); 1,3-butanediol, 3-methyl- (C5) PO<sub>4</sub>; 1,4-butanediol (C4) 2(Me E<sub>2-4</sub>); 1,4-butanediol (C4) PO<sub>4-5</sub>; 1.4-butanediol (C4) BO2; 1.4-butanediol, 2,2,3-trimethyl- (C7) E2-9; 1,4-butanediol, 2,2,3-trimethyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 2,2,3-trimethyl- (C7) n-BO<sub>1-3</sub>; 1,4butanediol, 2,2-dimethyl- (C6) (Me E<sub>1-6</sub>); 1,4-butanediol, 2,2-dimethyl- (C6) PO<sub>2</sub>; 1,4-butanediol, 2,2-dimethyl- (C6) BO<sub>1</sub>; 1,4-butanediol, 2,3-dimethyl- (C6) (Me E<sub>1</sub>-6); 1,4-butanediol, 2,3-dimethyl- (C6) PO2; 1,4-butanediol, 2,3-dimethyl- (C6) BO1; 1,4-butanediol, 2-ethyl- (C6) (Me E<sub>1-4</sub>); 1,4-butanediol, 2-ethyl- (C6) PO<sub>2</sub>; 1,4butanediol, 2-ethyl- (C6) BO<sub>1</sub>; 1,4-butanediol, 2-ethyl-2-methyl- (C7) E<sub>1-7</sub>; 1,4butanediol, 2-ethyl-2-methyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 2-ethyl-2-methyl- (C7) n-BO<sub>1-2</sub>; 1,4-butanediol, 2-ethyl-3-methyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 2-ethyl-3-methyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 2-ethyl-3-methyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 2-isopropyl- (C7) E<sub>1-7</sub>; 1,4-butanediol, 2-isopropyl- (C7) n-BO<sub>1-2</sub>; 1,4-butanediol, 2-methyl- (C5) (Me E<sub>6-10</sub>); 1,4-butanediol, 2-methyl- (C5) 2(Me E<sub>1</sub>); 1,4-butanediol, 2-methyl- (C5) PO<sub>3</sub>; 1,4-butanediol, 2-methyl- (C5) BO<sub>1</sub>; 1,4-butanediol, 2-propyl- (C7) E<sub>1-5</sub>; 1,4-butanediol, 2-propyl- (C7) n-BO<sub>1-2</sub>; 1,4-butanediol, 3-ethyl-1-methyl- (C7) E<sub>2-9</sub>; 1,4-butanediol, 3-ethyl-1-methyl- (C7) n-BO<sub>1-3</sub>; 2,3-butanediol (C4) (Me E<sub>6-10</sub>); 2,3-butanediol (C4) 2(Me E<sub>1</sub>); 2,3-butanediol (C4) PO<sub>3-4</sub>; 2,3-butanediol (C4) BO<sub>1</sub>; 2,3-butanediol, 2,3-dimethyl- (C6) n-BO<sub>1-3</sub>; 2,3-butanediol, 2-methyl- (C5) (Me E<sub>1-5</sub>); 2,3-butanediol, 2-methyl- (C5) PO<sub>2</sub>; 2,3-butanediol, 2-methyl- (C5) BO<sub>1</sub>;

1,2-pentanediol (C5) E<sub>3/10</sub>; 1,2-pentanediol, (C5) PO<sub>1</sub>; 1,2pentanediol, (C5) n-BO<sub>2-3</sub>; 1,2-pentanediol, 2-methyl (C6) E<sub>1-3</sub>; 1,2-pentanediol, 2methyl (C6) n-BO<sub>1</sub>; 1,2-pentanediol, 2-methyl (C6) BO<sub>1</sub>; 1,2-pentanediol, 3-methyl (C6) E<sub>1-3</sub>, 1,2-pentanediol, 3-methyl (C6) n-BO<sub>1</sub>, 1,2-pentanediol, 4-methyl (C6) E<sub>1-3</sub>, 1,2-pentanediol, 4-methyl (C6) n-BO<sub>1</sub>, 1,3-pentanediol (C5) 2(Me-E<sub>1-2</sub>); 1,3pentanediol (C5) PO<sub>3-4</sub>; 1,3-pentanediol, 2,2-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3pentanediol, 2,2-dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 2,2-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3-pentanediol, 2,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, /2,3-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3-pentanediol, 2,4-dimethyl-(C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 2,4-dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 2,4dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3-pentanediol, 2-ethyl- (C7) E<sub>2-9</sub>; 1,3-pentanediol, 2ethyl- (C7) PO<sub>1</sub>/1,3-pentanediol, 2-ethyl- (C7) n-BO<sub>1-3</sub>; 1,3-pentanediol, 2-methyl-(C6)  $2(Me-E_{1-6})$ ; 1,3-pentanediol, 2-methyl- (C6)  $PO_{2-3}$ ; 1,3-pentanediol, 2methyl- (C6) BO1; 1,3-pentanediol, 3,4-dimethyl- (C7) (Me-E1); 1,3-pentanediol, 3,4-dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 3,4-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3pentanediol, 3-methyl- (C6) (Me-E<sub>1-6</sub>); 1,3-pentanediol, 3-methyl- (C6) PO<sub>2-3</sub>; 1,3pentanediol, 3-methyl- (C6) BO<sub>1</sub>; 1,3-pentanediol, 4,4-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3pentanediol, 4,4-dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 4,4-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3-pentanediol, 4-methyl- (C6) (Me-E<sub>1-6</sub>); 1,3-pentanediol, 4-methyl- (C6) PO<sub>2-3</sub>; 1,3-pentanediol, 4-methyl- (C6) BO<sub>1</sub>; 1,4-pentanediol, (C5) 2(Me-E<sub>1-2</sub>); 1,4pentanediol (C5) PO<sub>3-4</sub>; 1,4-pentanediol, 2,2-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4pentanediol, 2,2-dimethyl- (C7) PO1; 1,4-pentanediol, 2,2-dimethyl- (C7) n-BO2-4; 1,4-pentanediol, 2,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 2,3-aimethyl- (C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 2,4-dimethyl-(C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 2,4-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 2,4dimethyl- (C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 2-methyl- (C6) (Me- $E_{1/-6}$ ); 1,4pentanediol, 2-methyl- (C6) PO<sub>2-3</sub>; 1,4-pentanediol, 2-methyl- (C6)/BO<sub>1</sub>; 1,4pentanediol, 3,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 3,3-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 3,3-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 3,4-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 3,4-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 3,4-dimethyl-(C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 3-methyl- (C6) 2(Me- $E_{1-6}$ ); /1,4-pentanediol, 3methyl- (C6) PO<sub>2-3</sub>; 1,4-pentanediol, 3-methyl- (C6) BO<sub>1</sub>/1,4-pentanediol, 4methyl- (C6) 2(Me-E<sub>1-6</sub>); 1,4-pentanediol, 4-methyl- (C6) PO<sub>2-3</sub>; 1,4-pentanediol, 4-methyl- (C6) BO<sub>1</sub>; 1,5-pentanediol, (C5) (Me-E<sub>4-10</sub>); 1,5-pentanediol (C5) 2(Me-E<sub>1</sub>); 1,5-pentanediol (C5) PO<sub>3</sub>; 1,5-pentanediol, 2,2-dimethyl- (C7) E<sub>1-7</sub>; 1,5pentanediol, 2,2-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 2/2-dimethyl- (C7) n-BO<sub>1-2</sub>; 1,5-pentanediol, 2,3-dimethyl- (C7) E<sub>1-7</sub>; 1,5-pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 2,3-dimethyl- (C7) n-BO<sub>1-2</sub>; 1,5-pentanediol, 2,4-dimethyl- (C7) E<sub>1-7</sub>; 1,5-pentanediol, 2,4-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 2,4-dimethyl- (C7) n-BO<sub>1-2</sub>; 1,5-pentanediol, 2-ethyl- (C7) E<sub>1-5</sub>; 1,5-pentanediol, 2-ethyl- (C7) n-BO<sub>1</sub> 2, 1,5-pentanediol, 2-methyl- (C6) (Me-E<sub>1-4</sub>); 1,5-pentanediol, 2-methyl- (C6) PO<sub>2</sub>; 1,5-pentanediol, 3,3-dimethyl- (C7) E<sub>1-7</sub>; 1,5-pentanediol, 3,3-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 3,3-dimethyl- (C7) n-BO<sub>1-2</sub>; 1,5-pentanediol, 3-methyl- (C6) (Me- $E_{1-4}$ ); 1,5-pentanediol, 3-methyl- (C6)  $PO_2$ ; 2,3-pentanediol, (C5) (Me- $E_{1-3}$ ); 2,3pentanediol, (C5) PO<sub>2</sub>, 2,3-pentanediol, 2-methyl- (C6) E<sub>1-7</sub>, 2,3-pentanediol, 2methyl- (C6) PO<sub>1</sub>; 2,3-pentanediol, 2-methyl- (C6) n-BO<sub>1-2</sub>; 2,3-pentanediol, 3methyl- (C6) E<sub>1-7</sub>; 2,3-pentanediol, 3-methyl- (C6) PO<sub>1</sub>; 2,3-pentanediol, 3-methyl-(C6) n-BO<sub>1-2</sub>; 2,3-pentanediol, 4-methyl- (C6)  $E_{1-7}$ ; 2,3-pentanediol, 4-methyl-(C6) PO<sub>1</sub>; 2,3-pentanediol, 4-methyl- (C6) n-BO<sub>1-2</sub>; 2,4-pentanediol, (C5) 2(Me- $E_{1-4}$ ); 2,4-pentanediol (C5) PO<sub>4</sub>; 2,4-pentanediol, 2,3-dimethyl- (C7) (Me- $E_{1-4}$ ); 2,4-pentanediol, 2,3-dimethyl- (C7) PO<sub>2</sub>, 2,4-pentanediol, 2,4-dimethyl- (C7) (Me-E<sub>1-4</sub>); 2,4-pentanediol, 2,4-dimethyl- (C7) PO<sub>2</sub>; 2,4-pentanediol, 2-methyl- (C7) (Me-E<sub>5-10</sub>); 2,4-pentanediol, 2-methyl- (C7) PO<sub>3</sub>; 2,4-pentanediol, 3,3-dimethyl-(C7) (Me-E<sub>1-4</sub>); 2,4-pentanediol, 3,3-dimethyl- (C7) PO<sub>2</sub>; 2,4-pentanediol, 3methyl- (C6) (Me-E<sub>5-10</sub>); 2,4-pentanediol, 3-methyl- (C6) PO<sub>3</sub>;

4. 1,3-hexanediol (C6) (Me-E<sub>1-5</sub>); 1,3-hexanediol (C6) PO<sub>2</sub>; 1,3-hexanediol (C6) BO<sub>1</sub>; 1,3-hexanediol, 2-methyl- (C7) E<sub>2-9</sub>; 1,3-hexanediol, 2-methyl- (C7) PO<sub>1</sub>; 1,3-hexanediol, 2-methyl- (C7) BO<sub>1</sub>; 1,3-hexanediol, 3-methyl- (C7) E<sub>2-9</sub>; 1,3-hexanediol, 3-methyl- (C7) PO<sub>1</sub>; 1,3-hexanediol, 3-methyl- (C7) n-BO<sub>1-3</sub>; 1,3-hexanediol, 4-methyl- (C7)

 $E_{2-9}$ ; 1,3-hexanediol, 4-methyl- (C7)  $PO_1$ ; 1,3-hexanediol, 4-methyl- (C7)  $\pi$ - $BO_{1-3}$ ; 1,3-hexanediol, 5-methyl- (C7) E<sub>2-9</sub>; 1,3-hexanediol, 5-methyl- (C7) PO<sub>1</sub>; 1,3hexanediol, 5-methyl- (C7) n-BO<sub>1-3</sub>; 1,4-hexanediol (C6) (Me-E<sub>1-5</sub>); 1,4-hexanediol (C6) PO<sub>2</sub>, 1,4-hexanediol (C6) BO<sub>1</sub>, 1,4-hexanediol, 2-methyl- (C7) E<sub>2-9</sub>, 1,4hexanediol, 2-methyl- (C7) PO<sub>1</sub>; 1,4-hexanediol, 2-methyl- (C7) /n-BO<sub>1-3</sub>; 1,4hexanediol, 3-methyl- (C7) E<sub>2-9</sub>; 1,4-hexanediol, 3-methyl- (C7) PO<sub>1</sub>; 1,4hexanediol, 3-methyl- (C7) n-BO<sub>1-3</sub>; 1,4-hexanediol, 4-methyl- (C7) E<sub>2-9</sub>; 1,4hexanediol, 4-methyl- (C7) PO<sub>1</sub>; 1,4-hexanediol, 4-methyl- (C7) n-BO<sub>1-3</sub>; 1,4hexanediol, 5-methyl- (C7) E<sub>2-9</sub>; 1,4-hexanediol, 5-methyl- (C7) PO<sub>1</sub>; 1,4hexanediol, 5-methyl- (C7) n-BO<sub>1-3</sub>; 1,5-hexanediol (C6) (Me-E<sub>1-5</sub>); 1,5-hexanediol (C6) PO<sub>2</sub>, 1,5-hexanediol (C6) BO<sub>1</sub>; 1,5-hexanediol, 2-methyl- (C7) E<sub>2-9</sub>; 1,5hexanediol, 2-methyl- (C7) PO<sub>1</sub>; 1,5-hexanediol, 2-methyl- (C7) n-BO<sub>1-3</sub>; 1,5hexanediol, 3-methyl- (C7) E<sub>2-9</sub>; 1,5-hexanediol, 3-methyl- (C7) PO<sub>1</sub>; 1,5hexanediol, 3-methyl- (C7) n-BO<sub>1-3</sub>; 1,5-hexanediol, 4-methyl- (C7) E<sub>2-9</sub>; 1,5hexanediol, 4-methyl- (C7) PO<sub>1</sub>; 1,5-hexanediol, 4-methyl- (C7) n-BO<sub>1-3</sub>; 1,5hexanediol, 5-methyl- (C7) E2-9; 1,5-hexanediol, 5-methyl- (C7) PO1; 1,5hexanediol, 5-methyl- (C7) n-BO<sub>1-3</sub>; 1,6-hexanediol (C6) (Me-E<sub>1-2</sub>); 1,6-hexanediol (C6) PO<sub>1-2</sub>; 1,6-hexanediol (C6) n-BO<sub>4</sub>;/1,6-hexanediol, 2-methyl- (C7) E<sub>1-5</sub>; 1,6hexanediol, 2-methyl- (C7) n-BO<sub>1-2</sub>;  $\Lambda$ , 6-hexanediol, 3-methyl- (C7) E<sub>1-5</sub>; 1,6hexanediol, 3-methyl- (C7) n-BO<sub>1-2</sub>;  $\mathbb{Z}$ , 3-hexanediol (C6) E<sub>1-5</sub>; 2, 3-hexanediol (C6) n-BO<sub>1</sub>; 2,3-hexanediol (C6) BO<sub>1</sub>;/2,4-hexanediol (C6) (Me-E<sub>3-8</sub>); 2,4-hexanediol (C6) PO<sub>3</sub>; 2,4-hexanediol, 2-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 2-methyl- (C7) PO<sub>1-2</sub>, 2,4-hexanediol, 3-methyl- (C7) (Me-E<sub>1-2</sub>), 2,4-hexanediol 3-methyl- (C7) PO<sub>1-2</sub>, 2,4-hexanediol, 4-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 4-methyl- (C7) PO<sub>1-2</sub>; 2,4-hexanediol, 5-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 5-methyl- (C7) PO<sub>1-2</sub>; 2,5-hexanediol (C6) (Me-E<sub>3-8</sub>); 2,5-hexanediol (C6) PO<sub>3</sub>; 2,5-hexanediol, 2methyl- (C7) (Me-E<sub>1-2</sub>); 2,5-hexanediol 2-methyl- (C7) PO<sub>1-2</sub>; 2,5-hexanediol, 3methyl- (C7) (Me- $E_{1-2}$ ); 2,5-hexanediol 3-methyl- (C7) PO<sub>1-2</sub>; 3,4-hexanediol (C6) EO<sub>1-5</sub>; 3,4-hexanediol (C6) n-BO<sub>1</sub>; 3,4-hexanediol (C6) BO<sub>1</sub>;

5. 1,3-heptanediol (C7)  $E_{1-7}$ ; 1,3-heptanediol (C7)  $PO_1$ ; 1,3-heptanediol (C7)  $n-BO_{1-2}$ ; 1,4-heptanediol (C7)  $E_{1-7}$ ; 1,4-heptanediol (C7)  $PO_1$ , 1,4-heptanediol (C7)  $n-BO_{1-2}$ ; 1,5-heptanediol (C7)  $E_{1-7}$ ; 1,5-heptanediol (C7)  $PO_1$ ; 1,5-heptanediol (C7)  $PO_1$ ; 1,6-heptanediol (C7)  $PO_1$ ; 2,4-heptanediol (C7)  $PO_1$ ; 2,4-heptanediol (C7)  $PO_1$ ; 2,5-heptanediol (PO\_1)

BO<sub>3</sub>; 2,6-heptanediol (C7)  $E_{3-10}$ ; 2,6-heptanediol (C7) (Me- $E_1$ ); 2,6-heptanediol (C7) PO<sub>1</sub>; 2,6-heptanediol (C7) n-BO<sub>3</sub>; 3,5-heptanediol (C7)  $E_{3-10}$ ; 3,5-heptanediol (C7) (Me- $E_1$ ); 3,5-heptanediol (C7) PO<sub>1</sub>; 3,5-heptanediol (C7) n-BO<sub>3</sub>;

1,3-butanediol, 3-methyl-2-isopropyl- (C8) PO1; 2,4/pentanediol, 2,3,3-trimethyl- (C8) PO<sub>1</sub>; 1,3-butanediol, 2,2-diethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 2,3-dimethyl- (C8)  $E_{2-5}$ , 2,4-hexanediol, 2,4-dimethyl- (C8)  $E_{2-5}$ /2,4-hexanediol, 2,5-dimethyl- (C8)  $E_{2-5}$ ; 2,4-hexanediol, 3,3-dimethyl- (C8)  $E_{2-5}$ ; 2,4-hexanediol, 3,4-dimethyl- (C8)  $E_{2-5}$ ; 2,4-hexanediol, 3,5-dimethyl- (C8)  $E_{2-5}$ ; 2,4-hexanediol, 4,5-dimethyl- (C8)  $E_{2-5}$ ; 2,4-hexanediol, 5,5-dimethyl- (C8)  $\cancel{E}_{2-5}$ ; 2,5-hexanediol, 2,3-dimethyl- (C8)  $E_{2-5}$ ; 2,5-hexanediol, 2,4-dimethyl- (C8)  $E_{2-5}$ ; 2,5-hexanediol, 2,5-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 3,3-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 3,4-dimethyl- (C8)  $E_{2-5}$ ; 3,5-heptanediol, 3-methyl- (C8)  $E_{2-5}$ ; 1,3-butanediol, 2,2diethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,3-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,4-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,5-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4hexanediol, 3,3-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 3,4-dimethyl- (C8) n-BO<sub>1-</sub> 2, 2,4-hexanediol, 3,5-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 4,5-dimethyl- (C8)  $n-BO_{1-2}$ ; 2,4-hexanediol, 5,5-dimethyl-,  $n-BO_{1-2}$ ; 2,5-hexanediol, 2,3-dimethyl-(C8) n-BO<sub>1-2</sub>; 2,5-hexanediol, 2,4-dimethyl-/(C8) n-BO<sub>1-2</sub>; 2,5-hexanediol, 2,5dimethyl- (C8) n-BO<sub>1-2</sub>; 2,5-hexanediol, / 3,3-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,5hexanediol, 3,4-dimethyl- (C8) n-BO<sub>1-2</sub>; 3/5-heptanediol, 3-methyl- (C8) n-BO<sub>1-2</sub>; 1,3-propanediol, 2-(1,2-dimethylpropyl)- (C8) n-BO<sub>1</sub>; 1,3-butanediol, 2-ethyl-2,3dimethyl- (C8) n-BO<sub>1</sub>; 1,3-butanediol/ 2-methyl-2-isopropyl- (C8) n-BO<sub>1</sub>; 1,4butanediol, 3-methyl-2-isopropyl- (C8) n-BO<sub>1</sub>; 1,3-pentanediol, 2,2,3-trimethyl-(C8) n-BO<sub>1</sub>; 1,3-pentanediol, 2,2,4-trimethyl- (C8) n-BO<sub>1</sub>; 1,3-pentanediol, 2,4,4trimethyl- (C8) n-BO<sub>1</sub>; 1,3-pentanediol, 3,4,4-trimethyl- (C8) n-BO<sub>1</sub>; 1,4pentanediol, 2,2,3-trimethyl- (C8) n-BO<sub>1</sub>; 1,4-pentanediol, 2,2,4-trimethyl- (C8) n-BO<sub>1</sub>; 1,4-pentanediol, 2,3,3-trimethyl- (C8) n-BO<sub>1</sub>; 1,4-pentanediol, 3,3,4-trimethyl-(C8) n-BO<sub>1</sub>; 2,4-pentanediol, 2,3,4-trimethyl- (C8) n-BO<sub>1</sub>; 2,4-hexanediol, 4-ethyl-(C8) n-BO<sub>1</sub>; 2,4-heptanediol, 2-methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 3-methyl-(C8) n-BO<sub>1</sub>; 2,4-heptanediol, 4-methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 5-methyl-(C8) n-BO<sub>1</sub>; 2,4-heptanediol, 6-methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 2-methyl-(C8) n-BO<sub>1</sub>; 2,5-heptanediol, 3-methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 4-methyl-(C8) n-BO<sub>1</sub>; 2,5-heptanediol, 5-methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 6-methyl-(C8) n-BO<sub>1</sub>, 2,6-heptanediol, 2-methyl- (C8) n-BO<sub>1</sub>, 2,6-heptanediol, 3-methyl-(C8) n-BO<sub>1</sub>; 2,6-heptanediol, 4-methyl- (C8) n-BO<sub>1</sub>; 3,5-heptanediol, 2-methyl-(C8) n-BO<sub>1</sub>, 1,3-propanediol, 2-(1,2-dimethylpropyl)- (C8) E<sub>1-3</sub>, 1,3-butanediol, 2ethyl-2,3-dimethyl- (C8) E<sub>1-3</sub>; 1,3-butanediol, 2-methyl-2-isopropyl- (C8) E<sub>1-3</sub>; 1,4butanediol, 3-methyl-2-isopropyl- (C8)  $E_{1-3}$ ; 1,3-pentanediol, 2,2,3-trimethyl- (C8)  $E_{1-3}$ ; 1,3-pentanediol, 2,2,4-trimethyl- (C8)  $E_{1-3}$ ; 1,3-pentanediol, 2,4,4-trimethyl- (C8)  $E_{1-3}$ ; 1,4-pentanediol, 2,2,3-trimethyl- (C8)  $E_{1-3}$ ; 1,4-pentanediol, 2,2,3-trimethyl- (C8)  $E_{1-3}$ ; 1,4-pentanediol, 2,3,3-trimethyl- (C8)  $E_{1-3}$ ; 1,4-pentanediol, 3,3,4-trimethyl- (C8)  $E_{1-3}$ ; 2,4-pentanediol, 2,3,4-trimethyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol, 2-methyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol, 3-methyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol, 4-methyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol, 5-methyl- (C8)  $E_{1-3}$ ; 2,5-heptanediol, 3-methyl- (C8)  $E_{1-3}$ ; 2,5-heptanediol, 3-methyl- (C8)  $E_{1-3}$ ; 2,5-heptanediol, 5-methyl- (C8)  $E_{1-3}$ ; 2,5-heptanediol, 5-methyl- (C8)  $E_{1-3}$ ; 2,5-heptanediol, 2-methyl- (C8)  $E_{1-3}$ ; 2,6-heptanediol, 4-methyl- (C8)  $E_{1-3}$ ; 2,6-

- 35. The composition of Claim 34 wherein said principal solvent is selected from the group consisting of:
- 1,2-propanediol (C3) 2(Me-E<sub>3-4</sub>); 1,2-propanediol (C3) PO<sub>4</sub>; 1,2propanediol, 2-methyl- (C4) (Me-E<sub>8-10</sub>);/1,2-propanediol, 2-methyl- (C4) 2(Me-E<sub>1</sub>); 1,2-propanediol, 2-methyl- (C4) PO<sub>3</sub>; 1,3-propanediol (C3) 2(Me-E<sub>8</sub>); 1,3propanediol (C3) PO6; 1,3-propanediol, 2,2-diethyl- (C7) E<sub>4-7</sub>; 1,3-propanediol, 2,2-diethyl- (C7) PO1; 1,3-propanediol, 2,2-diethyl- (C7) n-BO2; 1,3-propanediol, 2,2-dimethyl- (C5) 2(Me  $E_{1-2}$ ); 1,3-propanediol, 2,2-dimethyl- (C5) PO<sub>4</sub>; 1,3propanediol, 2-(1-methylpropyl)- (C7) E<sub>4-7</sub>; 1,3-propanediol, 2-(1-methylpropyl)-(C7) PO<sub>1</sub>; 1,3-propanediol, 2/(1-methylpropyl)- (C7) n-BO<sub>2</sub>; 1,3-propanediol, 2-(2methylpropyl)- (C7)  $E_{4-7}/1,3$ -propanediol, 2-(2-methylpropyl)- (C7)  $PO_1$ , 1,3propanediol, 2-(2-methylpropyl)- (C7) n-BO2; 1,3-propanediol, 2-ethyl- (C5) (Me E<sub>9-10</sub>); 1,3-propanediol, 2-ethyl- (C5) 2(Me E<sub>1</sub>); 1,3-propanediol, 2-ethyl- (C5) PO<sub>3</sub>; 1,3-propanediol, 2-ethyl-2-methyl- (C6) (Me E<sub>3-6</sub>); 1,3-propanediol, 2-ethyl-2methyl- (C6) PO<sub>2</sub>, 1,3-propanediol, 2-ethyl-2-methyl- (C6) BO<sub>1</sub>; 1,3-propanediol, 2isopropyl- (C6) (Me E<sub>3-6</sub>); 1,3-propanediol, 2-isopropyl- (C6) PO<sub>2</sub>; 1,3propanediol, 2-isopropyl- (C6) BO1; 1,3-propanediol, 2-methyl- (C4) 2(Me E<sub>4-5</sub>); 1,3-propanediol, 2-methyl- (C4) PO5; 1,3-propanediol, 2-methyl- (C4) BO2; 1,3propanediol, 2-methyl-2-isopropyl- (C7) E<sub>6-9</sub>; 1,3-propanediol, 2-methyl-2isopropyl- (C7) PO<sub>1</sub>; 1,3-propanediol, 2-methyl-2-isopropyl- (C7) n-BO<sub>2-3</sub>; 1,3propanediol, 2-methyl-2-propyl- (C7) E<sub>4-7</sub>; 1,3-propanediol, 2-methyl-2-propyl-

(C7) PO<sub>1</sub>, 1,3-propanediol, 2-methyl-2-propyl- (C7) n-BO<sub>2</sub>, 1,3-propanediol, 2-propyl- (C6) (Me E<sub>1-4</sub>); 1,3-propanediol, 2-propyl- (C6) PO<sub>2</sub>;

1,2-butanediol (C4) (Me  $E_{6-8}$ ); 1,2-butanediol (C4)  $PO_{2-3}$ ; 1,2-butanediol (C4) BO<sub>1</sub>; 1.2-butanediol, 2,3-dimethyl- (C6)  $E_{2-5}$ , 1,2-butanediol,  $\not \mathbb{Z}$ ,3-dimethyl-(C6) n-BO<sub>1</sub>; 1,2-butanediol, 2-ethyl- (C6) E<sub>1-3</sub>; 1,2-butanediol, 2-ethyl- (C6) n-BO<sub>1</sub>; 1,2-butanediol, 2-methyl- (C5) (Me  $E_{1-2}$ ), 1,2-butanediol/2-methyl- (C5) PO<sub>1</sub>; 1,2-butanediol, 3,3-dimethyl- (C6) E<sub>2-5</sub>; 1,2-butanediol, 3,3-dimethyl- (C6) n-BO<sub>1</sub>, 1,2-butanediol, 3-methyl- (C5) (Me  $E_{1-2}$ ); 1,2-butanediol, 3-methyl- (C5) PO<sub>1</sub>; 1,3-butanediol (C4) 2(Me  $E_{5-6}$ ); 1,3-butanediol (C4)/BO<sub>2</sub>; 1,3-butanediol, 2,2,3-trimethyl- (C7) (Me  $E_{1-3}$ ); 1,3-butanediol, 2,2,3-trimethyl- (C7) PO<sub>2</sub>; 1,3butanediol, 2,2-dimethyl- (C6) (Me E<sub>6-8</sub>); 1,3-butanediol,/2,2-dimethyl- (C6) PO<sub>3</sub>; 1,3-butanediol, 2,3-dimethyl- (C6) (Me E<sub>6-8</sub>); 1,3-butanediol, 2,3-dimethyl- (C6) PO<sub>3</sub>; 1,3-butanediol, 2-ethyl- (C6) (Me E<sub>4-6</sub>); 1,3-butanediol, 2-ethyl- (C6) PO<sub>2-3</sub>. 1.3-butanediol, 2-ethyl- (C6) BO<sub>1</sub>; 1.3-butanediol, 2-ethyl-2-methyl- (C7) (Me E<sub>1</sub>), 1,3-butanediol, 2-ethyl-2-methyl- (C7) PO1; 1,3-butanediol, 2-ethyl-2-methyl- (C7) n-BO3; 1,3-butanediol, 2-ethyl-3-methyl- (C7) (Me E1); 1,3-butanediol, 2-ethyl-3methyl- (C7) PO<sub>1</sub>; 1,3-butanediol, 2-ethyl-3-methyl- (C7) n-BO<sub>3</sub>; 1,3-butanediol, 2isopropyl- (C7) (Me E<sub>1</sub>); 1,3-butanediol, 2-isopropyl- (C7) PO<sub>1</sub>; 1,3-butanediol, 2isopropyl- (C7) n-BO3; 1,3-butanediol, 2-methyl- (C5) 2(Me E2-3); 1,3-butanediol, 2-methyl- (C5) PO<sub>4</sub>; 1,3-butanediol, 2-propyl- (C7) E<sub>6-8</sub>; 1,3-butanediol, 2-propyl-(C7) PO<sub>1</sub>; 1,3-butanediol, 2-propyl- (C7)/n-BO<sub>2-3</sub>; 1,3-butanediol, 3-methyl- (C5) 2(Me  $E_{2-3}$ ); 1,3-butanediol, 3-methyl- (C5) PO<sub>4</sub>; 1,4-butanediol (C4) 2(Me  $E_{3-4}$ ), 1,4-butanediol (C4) PO<sub>4-5</sub>; 1,4-butanediol, 2,2,3-trimethyl- (C7) E<sub>6-9</sub>; 1,4butanediol, 2,2,3-trimethyl- (C7) PO<sub>1</sub>/, 1,4-butanediol, 2,2,3-trimethyl- (C7) n-BO<sub>2</sub>-3; 1,4-butanediol, 2,2-dimethyl- (C6) (Me E<sub>3-6</sub>); 1,4-butanediol, 2,2-dimethyl- (C6) PO<sub>2</sub>; 1,4-butanediol, 2,2-dimethyl- (C6) BO<sub>1</sub>; 1,4-butanediol, 2,3-dimethyl- (C6) (Me E<sub>3-6</sub>); 1,4-butanediol, 2,3-dimethyl- (C6) PO<sub>2</sub>; 1,4-butanediol, 2,3-dimethyl-(C6) BO<sub>1</sub>; 1,4-butanediol, 2-ethyl- (C6) (Me E<sub>1-4</sub>); 1,4-butanediol, 2-ethyl- (C6) PO<sub>2</sub>; 1,4-butanediol, 2-ethyl-2-methyl- (C7) E<sub>4-7</sub>; 1,4-butanediol, 2-ethyl-2-methyl-(C7) PO<sub>1</sub>; 1,4-butanediol, 2-ethyl-2-methyl- (C7) n-BO<sub>2</sub>; 1,4-butanediol, 2-ethyl-3methyl- (C7) E<sub>4-7</sub>; 1,4-butanediol, 2-ethyl-3-methyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 2ethyl-3-methyl- (C7) n-BO<sub>2</sub>; 1,4-butanediol, 2-isopropyl- (C7) E<sub>4-7</sub>; 1,4-butanediol, 2-isopropyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 2-isopropyl- (C7) n-BO<sub>2</sub>; 1,4-butanediol, 2methyl- (C5) (Me E<sub>9-10</sub>); 1,4-butanediol, 2-methyl- (C5) 2(Me E<sub>1</sub>); 1,4-butanediol, 2-methyl- (C5) PO<sub>3</sub>; 1,4-butanediol, 2-propyl- (C7) E<sub>2-5</sub>; 1,4-butanediol, 2-propyl-(C7) n-BO<sub>1</sub>; 1,4-butanediol, 3-ethyl-1-methyl- (C7) E<sub>6-8</sub>; 1,4-butanediol, 3-ethyl-1methyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 3-ethyl-1-methyl- (C7) n-BO<sub>2-3</sub>; 2,3-butanediol

(C4) (Me E<sub>9-10</sub>), 2,3-butanediol (C4) 2(Me E<sub>1</sub>), 2,3-butanediol (C4) PO<sub>3</sub>  $\frac{1}{4}$ ; 2,3-butanediol, 2,3-dimethyl- (C6) E<sub>7-9</sub>, 2,3-butanediol, 2,3-dimethyl- (C6) PO<sub>1</sub>; 2,3-butanediol, 2,3-dimethyl- (C5) PO<sub>2</sub>, 2,3-butanediol, 2-methyl- (C5) PO<sub>2</sub>; 2,3-butanediol, 2-methyl- (C5) BO<sub>1</sub>;

1,2-pentanediol (C5)  $E_{7-10}$ ; 1,2-pentanediol, (C5)/PO<sub>1</sub>, 1,2pentanediol, (C5) n-BO<sub>3</sub>; 1,2-pentanediol, 2-methyl (C6) E<sub>1-3</sub>; 1,2-pentanediol, 2methyl (C6) n-BO<sub>1</sub>; 1,2-pentanediol, 3-methyl (C6) E<sub>1-3</sub>; 1,2-pentanediol, 3-methyl (C6) n-BO<sub>1</sub>; 1,2-pentanediol, 4-methyl (C6) E<sub>1-3</sub>; 1,2-pentanediol/4-methyl (C6) n-BO<sub>1</sub>; 1,3-pentanediol (C5)  $2(Me-E_{1-2})$ ; 1,3-pentanediol (C5)  $PO_{3-4}$ ; 1,3pentanediol, 2,2-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 2,2-dimethyl- (C7) PO<sub>1</sub>, 1,3-pentanediol, 2,2-dimethyl- (C7) n-BO<sub>3</sub>; 1,3-pentanediol, 2,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>, 1,3-pentanediol, 2,3-dimethyl-(C7) n-BO<sub>3</sub>; 1,3-pentanediol, 2,4-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 2,4dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 2,4-dimethyl- (C7) n-BO<sub>2</sub>; 1,3-pentanediol, 2ethyl- (C7) E<sub>6-8</sub>; 1,3-pentanediol, 2-ethyl- (C7) PO<sub>1</sub>/1,3-pentanediol, 2-ethyl- (C7) n-BO<sub>2-3</sub>; 1,3-pentanediol, 2-methyl- (C6) 2(Me-E<sub>4-6</sub>); 1,3-pentanediol, 2-methyl-(C6) PO<sub>2-3</sub>; 1,3-pentanediol, 3,4-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 3,4dimethyl- (C7) PO1; 1,3-pentanediol, 3,4-dimethyl- (C7) n-BO3; 1,3-pentanediol, 3methyl- (C6) 2(Me-E<sub>4-6</sub>); 1,3-pentanediol, 3-methyl- (C6) PO<sub>2-3</sub>; 1,3-pentanediol, 4,4-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 4,4-dimethyl- (C7) PO<sub>1</sub>; 1,3pentanediol, 4,4-dimethyl- (C7) n-BO<sub>3</sub>, 1,3-pentanediol, 4-methyl- (C6) 2(Me-E<sub>4</sub>-6); 1,3-pentanediol, 4-methyl- (C6) PO<sub>2-3</sub>; 1,4-pentanediol, (C5) 2(Me-E<sub>1-2</sub>); 1,4pentanediol (C5) PO<sub>3-4</sub>; 1,4-pentanediol, 2,2-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4pentanediol, 2,2-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 2,2-dimethyl- (C7) n-BO<sub>3</sub>; 1,4-pentanediol, 2,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 2,3-dimethyl- (C7) n-BO<sub>3</sub>; 1,4-pentanediol, 2,4-dimethyl-(C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 2,4-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 2,4dimethyl- (C7) n-BO3; 1,4-pentanediol, 2-methyl- (C6) (Me-E4-6), 1,4-pentanediol, 2-methyl- (C6)  $/PO_{2-3}$ ; 1,4-pentanediol, 3,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4pentanediol, 3,3-dimethyl- (C7) PO<sub>1</sub>, 1,4-pentanediol, 3,3-dimethyl- (C7) n-BO<sub>3</sub>, 1,4-pentanediol, 3,4-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 3,4-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 3,4-dimethyl- (C7) n-BO<sub>3</sub>; 1,4-pentanediol, 3-methyl- (C6) 2(Me-E<sub>4-6</sub>); 1,4-pentanediol, 3-methyl- (C6) PO<sub>2-3</sub>; 1,4-pentanediol, 4-methyl-(C6) 2(Me-E<sub>4-6</sub>); 1,4-pentanediol, 4-methyl- (C6) PO<sub>2-3</sub>; 1,5-pentanediol, (C5) (Me-E<sub>8-10</sub>); 1,5-pentanediol (C5) 2(Me-E<sub>1</sub>); 1,5-pentanediol (C5) PO<sub>3</sub>; 1,5pentanediol, 2,2-dimethyl- (C7) E<sub>4-7</sub>, 1,5-pentanediol, 2,2-dimethyl- (C7) PO<sub>1</sub>, 1,5pentanediol, 2,2-dimethyl- (C7) n-BO<sub>2</sub>, 1,5-pentanediol, 2,3-dimethyl- (C7) E<sub>4-7</sub>,

1,5-pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 2,3-dimethyl- (C7) n-BO<sub>2</sub>; 1,5-pentanediol, 2,4-dimethyl- (C7) E<sub>4-7</sub>; 1,5-pentanediol, 2,4-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 2,4-dimethyl- (C7) n-BO<sub>2</sub>; 1,5-pentanediol, 2-ethyl- ( $\cancel{C}$ 7) E<sub>2</sub>-5; 1,5-pentanediol, 2-ethyl- (C7) n-BO<sub>1</sub>; 1,5-pentanediol, 2-methyl- (C6) (Me-E<sub>1-4</sub>); 1,5-pentanediol, 2-methyl- (C6) PO<sub>2</sub>; 1,5-pentanediol, 3,3-dimethyl- (C7)/E<sub>4-7</sub>; 1,5pentanediol, 3,3-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 3,3-dimethyl- (C7) n-BO<sub>2</sub>; 1,5-pentanediol, 3-methyl- (C6) (Me-E<sub>1-4</sub>); 1,5-pentanediol, 3-methyl- (C6) PO<sub>2</sub>; 2,3-pentanediol, (C5) (Me-E<sub>1-3</sub>); 2,3-pentanediol, (C5) PO<sub>2</sub>; 2,3-pentanediol, 2methyl- (C6) E<sub>4-7</sub>; 2,3-pentanediol, 2-methyl- (C6) PO<sub>1</sub>; 2,3-pentanediol, 2-methyl-(C6) n-BO<sub>2</sub>; 2,3-pentanediol, 3-methyl- (C6) E<sub>4-7</sub>; 2,3-pentanediol, 3-methyl- (C6) PO<sub>1</sub>; 2,3-pentanediol, 3-methyl- (C6) n-BO<sub>2</sub>; 2,3-pentanediol, 4-methyl- (C6) E<sub>4-7</sub>; 2,3-pentanediol, 4-methyl- (C6) PO<sub>1</sub>; 2,3-pentanediol, 4-methyl- (C6) n-BO<sub>2</sub>; 2,4pentanediol, (C5) 2(Me-E<sub>2-4</sub>); 2,4-pentanediol (C5) PO<sub>4</sub>; 2,4-pentanediol, 2,3dimethyl- (C7) (Me-E<sub>2-4</sub>); 2,4-pentanediol, 2,3-dimethyl- (C7) PO<sub>2</sub>; 2,4pentanediol, 2,4-dimethyl- (C7) (Me-E<sub>2-4</sub>); 2,4-pentanediol, 2,4-dimethyl- (C7) PO<sub>2</sub>; 2,4-pentanediol, 2-methyl- (C7) (Me-E<sub>8-10</sub>); 2,4-pentanediol, 2-methyl- (C7) PO<sub>3</sub>; 2,4-pentanediol, 3,3-dimethyl- (C7) (Me-E<sub>2-4</sub>), 2,4-pentanediol, 3,3-dimethyl-(C7) PO<sub>2</sub>; 2,4-pentanediol, 3-methyl- (C6) (Me-E<sub>8-10</sub>); 2,4-pentanediol, 3-methyl-(C6) PO3;

4. 1,3-hexanediol (C6) (Me-E<sub>2-5</sub>); 1,3-hexanediol (C6) PO<sub>2</sub>; 1,3hexanediol (C6) BO<sub>1</sub>; 1,3-hexanediol, 2-methyl- (C7) E<sub>6-8</sub>; 1,3-hexanediol, 2methyl- (C7) PO<sub>1</sub>; 1,3-hexanediol, 2-methyl- (C7) n-BO<sub>2-3</sub>; 1,3-hexanediol, 3methyl- (C7) E<sub>6-8</sub>; 1,3-hexanediol, 3-methyl- (C7) PO<sub>1</sub>; 1,3-hexanediol, 3-methyl-(C7) n-BO<sub>2-3</sub>; 1,3-hexanediol, 4-methyl- (C7) E<sub>6-8</sub>; 1,3-hexanediol, 4-methyl- (C7) PO<sub>1</sub>; 1,3-hexanediol, 4-methyl- (C7) p-BO<sub>2-3</sub>; 1,3-hexanediol, 5-methyl- (C7) E<sub>6-8</sub>; 1,3-hexanediol, 5-methyl- (C7) PO<sub>1</sub>, 1,3-hexanediol, 5-methyl- (C7) n-BO<sub>2-3</sub>, 1,4hexanediol (C6) (Me-E<sub>2-5</sub>); 1,4-hexanediol (C6) PO<sub>2</sub>; 1,4-hexanediol (C6) BO<sub>1</sub>; 1,4-hexanediol, 2-methyl- (C7)  $E_{6-8}$ ; 1,4-hexanediol, 2-methyl- (C7)  $PO_1$ ; 1,4hexanediol, 2-methyl- (C7) n-BO<sub>2-3</sub>; 1,4-hexanediol, 3-methyl- (C7) E<sub>6-8</sub>; 1,4hexanediol, 3-methyl- (C7) PO1; 1,4-hexanediol, 3-methyl- (C7) n-BO2-3; 1,4hexanediol, 4-methyl- (C7) E<sub>6-8</sub>; 1,4-hexanediol, 4-methyl- (C7) PO<sub>1</sub>; 1,4hexanediol, 4-methyl- (C7) n-BO<sub>2-3</sub>; 1,4-hexanediol, 5-methyl- (C7) E<sub>6-8</sub>; 1,4hexanediol, 5-methyl- (C7) PO<sub>1</sub>; 1,4-hexanediol, 5-methyl- (C7) n-BO<sub>2-3</sub>; 1,5hexanediol (C6) (Me-E<sub>2-5</sub>); 1,5-hexanediol (C6) PO<sub>2</sub>; 1,5-hexanediol (C6) BO<sub>1</sub>; 1,5-hexanediol, 2-methyl- (C7) E<sub>6-8</sub>; 1,5-hexanediol, 2-methyl- (C7) PO<sub>1</sub>; 1,5hexanediol, 2-methyl- (C7) n-BO<sub>2-3</sub>; 1,5-hexanediol, 3-methyl- (C7) E<sub>6-8</sub>; 1,5hexanediol, 3-methyl- (C7) PO<sub>1</sub>; 1,5-hexanediol, 3-methyl- (C7) n-BO<sub>2-3</sub>; 1,5hexanediol, 4-methyl- (C7) E<sub>6-8</sub>; 1,5-hexanediol, 4-methyl- (C7) PO<sub>1</sub>; 1,5-hexanediol, 4-methyl- (C7) n-BO<sub>2-3</sub>; 1,5-hexanediol, 5-methyl- (C7) E<sub>6-8</sub>; 1,5-hexanediol, 5-methyl- (C7) n-BO<sub>2-3</sub>; 1,6-hexanediol (C6) (Me-E<sub>1-2</sub>); 1,6-hexanediol (C6) PO<sub>1-2</sub>; 1,6-hexanediol (C6) n-BO<sub>4</sub>; 1,6-hexanediol, 2-methyl- (C7) E<sub>2-5</sub>; 1,6-hexanediol, 2-methyl- (C7) n-BO<sub>1</sub>; 1,6-hexanediol, 3-methyl- (C7) E<sub>2-5</sub>; 1,6-hexanediol, 3-methyl- (C7) n-BO<sub>1</sub>; 2,3-hexanediol (C6) E<sub>2-5</sub>; 2,3-hexanediol (C6) n-BO<sub>1</sub>; 2,4-hexanediol (C6) (Me-E<sub>5-8</sub>); 2,4-hexanediol (C6) PO<sub>3</sub>; 2,4-hexanediol, 2-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 2-methyl- (C7) PO<sub>1-2</sub>; 2,4-hexanediol, 3-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 4-methyl- (C7) PO<sub>1-2</sub>; 2,4-hexanediol, 5-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 5-methyl- (C7) PO<sub>1-2</sub>; 2,5-hexanediol (C6) (Me-E<sub>5-8</sub>); 2,5-hexanediol (C6) PO<sub>3</sub>; 2,5-hexanediol, 2-methyl- (C7) (Me-E<sub>1-2</sub>); 2,5-hexanediol 2-methyl- (C7) PO<sub>1-2</sub>; 2,5-hexanediol 3-methyl- (C7) PO<sub>1-2</sub>; 3,4-hexanediol (C6) EO<sub>2-5</sub>; 3,4-hexanediol (C6) n-BO<sub>1</sub>;

- 5. 1,3-heptanediol (C7) E<sub>3-6</sub>; 1,3-heptanediol (C7) PO<sub>1</sub>; 1,3-heptanediol (C7) n-BO<sub>2</sub>; 1,4-heptanediol (C7) E<sub>3-6</sub>; 1,4-heptanediol (C7) PO<sub>1</sub>; 1,4-heptanediol (C7) n-BO<sub>2</sub>; 1,5-heptanediol (C7) E<sub>3-6</sub>; 1,5-heptanediol (C7) PO<sub>1</sub>; 1,5-heptanediol (C7) n-BO<sub>2</sub>; 1,6-heptanediol (C7) E<sub>3-6</sub>; 1,6-heptanediol (C7) PO<sub>1</sub>; 1,6-heptanediol (C7) n-BO<sub>2</sub>; 1,7-heptanediol (C7) E<sub>1-2</sub>; 1,7-heptanediol (C7) n-BO<sub>1</sub>; 2,4-heptanediol (C7) m-BO<sub>3</sub>; 2,4-heptanediol (C7) (Me-E<sub>1</sub>); 2,4-heptanediol (C7) PO<sub>1</sub>; 2,5-heptanediol (C7) E<sub>7-10</sub>; 2,5-heptanediol (C7) (Me-E<sub>1</sub>); 2,5-heptanediol (C7) PO<sub>1</sub>; 2,5-heptanediol (C7) n-BO<sub>3</sub>; 2,6-heptanediol (C7) E<sub>7-10</sub>; 2,6-heptanediol (C7) PO<sub>1</sub>; 2,6-heptanediol (C7) n-BO<sub>3</sub>; 3,5-heptanediol (C7) n-BO<sub>3</sub>;
- 6. 1,3-butanediol, 3-methyl-2-isopropyl- (C8) PO<sub>1</sub>; 2,4-pentanediol, 2,3,3-trimethyl- (C8) PO<sub>1</sub>; 1,3-butanediol, 2,2-diethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 2,3-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 2,4-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 2,5-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 3,3-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 3,5-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 4,5-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 5,5-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 2,3-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 2,4-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 2,5-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 3,4-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 3,4-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 2,2-diethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,3-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,5-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexane

hexanediol, 3,3-dimethyl- (C8) n-BO<sub>1-2</sub>, 2,4-hexanediol, 3,4-dimethyl- (C8) n-B $\emptyset$ <sub>1-</sub> 2; 2,4-hexanediol, 3,5-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 4,5-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 5,5-dimethyl-, n-BO<sub>1-2</sub>; 2,5-hexanediol, 2,3-dimethyl-(C8) n-BO<sub>1-2</sub>; 2,5-hexanediol, 2,4-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,5-hexanediol, 2,5dimethyl- (C8) n-BO<sub>1-2</sub>, 2,5-hexanediol, 3,3-dimethyl- (C8) n-BO<sub>1-2</sub>, 2,5hexanediol, 3,4-dimethyl- (C8) n-BO<sub>1-2</sub>; 3,5-heptanediol, 3-methyl-/(C8) n-BO<sub>1-2</sub>; 1,3-propanediol, 2-(1,2-dimethylpropyl)- (C8) n-BO<sub>1</sub>; 1,3-butanediol, 2-ethyl-2,3dimethyl- (C8) n-BO<sub>1</sub>; 1,3-butanediol, 2-methyl-2-isopropyl-/(C8) n-BO<sub>1</sub>; 1,4butanediol, 3-methyl-2-isopropyl- (C8) n-BO<sub>1</sub>; 1,3-pentanediol, 2,2,3-trimethyl-(C8) n-BO<sub>1</sub>; 1,3-pentanediol, 2,2,4-trimethyl- (C8) n-BO<sub>1</sub>;  $\sqrt{1,3}$ -pentanediol, 2,4,4trimethyl- (C8) n-BO<sub>1</sub>; 1,3-pentanediol, 3,4,4-trimethyl- (C8) n-BO<sub>1</sub>; 1,4pentanediol, 2,2,3-trimethyl- (C8) n-BO<sub>1</sub>; 1,4-pentanediol, 2,2,4-trimethyl- (C8) n-BO<sub>1</sub>; 1,4-pentanediol, 2,3,3-trimethyl- (C8) n-BO<sub>1</sub>; 1,4-pentanediol, 2,3,4-trimethyl-(C8) n-BO<sub>1</sub>; 1,4-pentanediol, 3,3,4-trimethyl- (C8) n/BO<sub>1</sub>; 2,4-pentanediol, 2,3,4trimethyl- (C8) n-BO<sub>1</sub>; 2,4-hexanediol, 4-ethyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 2methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 3-methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 4methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 5-methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 6methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 2-methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 3methyl- (C8) n-BO1; 2,5-heptanediol, 4-methyl- (C8) n-BO1; 2,5-heptanediol, 5methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 6-methyl- (C8) n-BO<sub>1</sub>; 2,6-heptanediol, 2methyl- (C8) n-BO<sub>1</sub>; 2,6-heptanediol, 3-methyl- (C8) n-BO<sub>1</sub>; 2,6-heptanediol, 4methyl- (C8) n-BO1; 3,5-heptanediol, 2-methyl- (C8) n-BO1; 1,3-propanediol, 2-(1,2-dimethylpropyl)- (C8) E<sub>1-3</sub>; 1,3-butanediol, 2-ethyl-2,3-dimethyl- (C8) E<sub>1-3</sub>, 1,3-butanediol, 2-methyl-2-isopropyl-/(C8)  $E_{1-3}$ ; 1,4-butanediol, 3-methyl-2isopropyl- (C8) E<sub>1-3</sub>; 1,3-pentanediol, 2,2,3-trimethyl- (C8) E<sub>1-3</sub>; 1,3-pentanediol, 2,2,4-trimethyl- (C8)  $E_{1-3}$ , 1,3-pentanediol, 2,4,4-trimethyl- (C8)  $E_{1-3}$ , 1.3pentanediol, 3,4,4-trimethyl- (C8)  $E_{1-3}$ ; 1,4-pentanediol, 2,2,3-trimethyl- (C8)  $E_{1-3}$ . 1,4-pentanediol, 2,2,4-trimethyl- (C8)  $E_{1-3}$ ; 1,4-pentanediol, 2,3,3-trimethyl- (C8)  $E_{1-3}$ , 1,4-pentanediol, 2,3,4-trimethyl- (C8)  $E_{1-3}$ , 1,4-pentanediol, 3,3,4-trimethyl-(C8) E<sub>1-3</sub>, 2,4-pentanediol, 2,3,4-trimethyl- (C8) E<sub>1-3</sub>, 2,4-hexanediol, 4-ethyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol, 2-methyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol, 3-methyl- (C8)  $E_{1-3}$ . 2,4-heptanediol, 4-methyl- (C8) E<sub>1-3</sub>; 2,4-heptanediol, 5-methyl- (C8) E<sub>1-3</sub>; 2,4heptanediol, 6-methyl- (C8) E<sub>1-3</sub>, 2,5-heptanediol, 2-methyl- (C8) E<sub>1-3</sub>, 2,5heptanediol, 3-methyl- (C8) E<sub>1-3</sub>, 2,5-heptanediol, 4-methyl- (C8) E<sub>1-3</sub>, 2,5heptanediol, 5-methyl- (C8) E<sub>1-3</sub>; 2,5-heptanediol, 6-methyl- (C8) E<sub>1-3</sub>; 2,6heptanediol, 2-methyl- (C8) E<sub>1-3</sub>; 2,6-heptanediol, 3-methyl- (C8) E<sub>1-3</sub>; 2,6heptanediol, 4-methyl- (C8) E<sub>1-3</sub>; and/or 3,5-heptanediol, 2-methyl- (C8) E<sub>1-3</sub>; and

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## mixtures thereof.

- 36. The composition of any of Claims 11-15 wherein said principal solvent is selected from the group consisting of: 1-phenyl-1,2-ethanediol; 1-phenyl-1,2-propanediol; 2-phenyl-1,2-propanediol; 3-phenyl-1,2-propanediol; 1-(3-methylphenyl)-1,3-propanediol; 1-(4-methylphenyl)-1,3-propanediol; 2-methyl-1-phenyl-1,3-propanediol; 1-phenyl-1,3-butanediol; 1-phenyl-1,4-butanediol; 1-phenyl-2,3-butanediol; and mixtures thereof.
- 37. The composition of Claim 36 wherein said principal solvent is selected from the group consisting of:
  1-phenyl-1,2-ethanediol; 1-phenyl-1,2-propanediol; 2-phenyl-1,2-propanediol; 3-phenyl-1,2-propanediol; 1-(3-methylphenyl)-1,3-propanediol; 1-(4-methylphenyl)-1,3-propanediol; 2-methyl-1-phenyl-1,3-propanediol; 1-phenyl-1,3-butanediol; 3-phenyl-1,3-butanediol; 1-phenyl-1,4-butanediol; and mixtures thereof.
- The composition of Claim 37 wherein said principal solvent is selected from the group consisting of:

  1-phenyl-1,2-propanediol; 2-phenyl-1,2-propanediol; 3-phenyl-1,2-propanediol; 1-(3-methylphenyl)-1,3-propanediol; 1-(4-methylphenyl)-1,3-propanediol; 2-methyl-1-phenyl-1,3-propanediol; and/or/1-phenyl-1,4-butanediol; and mixtures thereof.
- 39. The composition of any of Claims 11-15 wherein said principal solvent is selected from the group consisting of: solvents are homologs, or analogs, of the parent compounds below where one, or more, CH<sub>2</sub> groups are added while, for each CH<sub>2</sub> group added, two hydrogen atoms are removed from adjacent carbon atoms in the molecule to form one carbon-carbon double bond, thus holding the number of hydrogen atoms in the molecule constant, the parent compounds including the following:
- I. / mono-ols including:
  - a. n-propanol; and/or
  - b. 2-butanol or 2-methyl-2-propanol;
- II. hexane diol isomers including: 2,3-butanediol, 2,3-dimethyl-; 1,2-butanediol, 2,3-dimethyl-; 1,2-butanediol, 3,3-dimethyl-; 2,3-pentanediol, 2-methyl-; 2,3-pentanediol, 3-methyl-; 2,3-pentanediol; 3,4-hexanediol; 3,4-hexanediol;

1,2-butanediol, 2-ethyl-; 1,2-pentanediol, 2-methyl-; 1,2-pentanediol, 3-methyl-; 1,2-pentanediol, 4-methyl-; and/or 1,2-hexanediol;

Ш. heptane diol isomers including: 1,3-propanediol, 2-butyl-; 1,3-propanediol, 2.2-diethyl-: 1.3-propanediol. 2-(1-methylpropyl)-: 1.3-propanediol. methylpropyl)-, 1,3-propanediol, 2-methyl-2-propyl-; 1,2-butanediol, 2/3,3-trimethyl-; 1,4-butanediol, 2-ethyl-2-methyl-; 1,4-butanediol, 2-ethyl-3-methyl-; 1,4-butanediol, 2-propyl-; 1,4-butanediol, 2-isopropyl-; 1,5-pentanediol, 2/2-dimethyl-; 1,5pentanediol, 2,3-dimethyl-; 1,5-pentanediol, 2,4-dimethyl-; 1,5-pentanediol, 3,3dimethyl-; 2,3-pentanediol, 2,3-dimethyl-; 2,3-pentanediol/ 2,4-dimethyl-; 2,3pentanediol, 3,4-dimethyl-; 2,3-pentanediol, 4,4-dimethyl-; 3,4-pentanediol, 2,3dimethyl-; 1,5-pentanediol, 2-ethyl-; 1,6-hexanediol, 2-methyl-; 1,6-hexanediol, 3methyl-; 2,3-hexanediol, 2-methyl-; 2,3-hexanediol, 3-methyl-; 2,3-hexanediol, 4methyl-; 2,3-hexanediol, 5-methyl-; 3,4-hexanediol, 2/methyl-; 3,4-hexanediol, 3methyl-; 1,3-heptanediol; 1,4-heptanediol; 1,5-heptanediol; and/or 1,6-heptanediol; IV. octane diol isomers including: 1,3-propanediol, 2-(2-methylbutyl)-; 1,3propanediol, 2-(1,1-dimethylpropyl)- 1,3-propanediol, 2-(1,2-dimethylpropyl)-, 1,3propanediol, 2-(1-ethylpropyl)-; 1,3-propanediol, 2-(1-methylbutyl)-; 1,3propanediol, 2-(2,2-dimethylpropyl)-; 1,3-propanediol, 2-(3-methylbutyl)-; 1,3propanediol, 2-butyl-2-methyl-; 1,3-propanediol. 2-ethyl-2-isopropyl-; 1,3propanediol, 2-ethyl-2-propyl-; 1,3-propanediol, 2-methyl-2-(1-methylpropyl)-; 1,3propanediol, 2-methyl-2-(2-methylpropyl)-; 1,3-propanediol, 2-tertiary-butyl-2methyl-; 1,3-butanediol, 2,2-diethyl-; /1,3-butanediol, 2-(1-methylpropyl)-; 1,3butanediol, 2-butyl-; 1,3-butanediol, 2-ethyl-2,3-dimethyl-; 1,3-butanediol, 2-(1,1dimethylethyl)-; 1,3-butanediol, 2-(2-methylpropyl)-; 1,3-butanediol, 2-methyl-2isopropyl-; 1,3-butanediol, 2-methyl-2-propyl-; 1,3-butanediol, 3-methyl-2-isopropyl-; 1,3-butanediol, 3-methyl-2-propyl-; 1,4-butanediol, 2,2-diethyl-; 1,4-butanediol, 2methyl-2-propyl-; 1,4-butanedio/, 2-(1-methylpropyl)-; 1,4-butanediol, 2-ethyl-2,3-2-ethyl-3,3-dimethyl-; 1.4-butanediol. 2-(1.1dimethyl-: 1,4-butanediol, dimethylethyl)-; 1,4-butanediol, 2-(2-methylpropyl)-; 1,4-butanediol, 2-methyl-3propyl-, 1,4-butanediol, 3-methyl-2-isopropyl-, 1,3-pentanediol, 2,2,3-trimethyl-, 1,3-pentanediol, 2,2,4-trimethyl-; 1,3-pentanediol, 2,3,4-trimethyl-; 1,3-pentanediol, 2,4,4-trimethyl-; 1,3-pentanediol, 3,4,4-trimethyl-; 1,4-pentanediol, 2,2,3-trimethyl-; 1.4-pentanediol, 2,2,4-trimethyl-; 1,4-pentanediol, 2,3,3-trimethyl-; 1,4-pentanediol, 2,3,4-trimethyl-; 1,4-pentanediol, 3,3,4-trimethyl-; 1,5-pentanediol, 2,2,3-trimethyl-, 1.5-pentanediol, 2,2,4-trimethyl-; 1,5-pentanediol, 2,3,3-trimethyl-; 1,5-pentanediol, 2,3,4-trimethyl-; 2,4-pentanediol, 2,3,3-trimethyl-; 2,4-pentanediol, 2,3,4-trimethyl-; 1,3-pentanediol, 2-ethyl-2-methyl-, 1,3-pentanediol, 2-ethyl-3-methyl-;

pentanediol, 2-ethyl-4-methyl-; 1,3-pentanediol, 3-ethyl-2-methyl-; 1,4-pentanediol, 2-ethyl-2-methyl-; 1.4-pentanediol, 2-ethyl-3-methyl-; 1.4-pentanediol, 2-ethyl-4methyl-; 1,4-pentanediol, 3-ethyl-2-methyl-; 1,4-pentanediol, 3-ethyl-3-methyl-; 1,5pentanediol, 2-ethyl-2-methyl-; 1,5-pentanediol, 2-ethyl-3-methyl-; 1,5-bentanediol, 2-ethyl-4-methyl-; 1,5-pentanediol, 3-ethyl-3-methyl-; 2,4-pentanediol, 3-ethyl-2methyl-; 1,3-pentanediol, 2-isopropyl-; 1,3-pentanediol, 2-propyl-; 1,4-pentanediol, 2-isopropyl-, 1,4-pentanediol, 2-propyl-, 1,4-pentanediol, 3,1sopropyl-, pentanediol, 2-isopropyl-; 2,4-pentanediol, 3-propyl-; 1,3-hexanediol, 2,2-dimethyl-; 1,3-hexanediol, 2,3-dimethyl-; 1,3-hexanediol, 2,4-dimethyl-;/1,3-hexanediol, 2,5-3,5-dimethyl-; dimethyl-; 1,3-hexanediol, 3,4-dimethyl-; 1,3-hexanediol hexanediol, 4,5-dimethyl-; 1,4-hexanediol, 2,2-dimethyk; 1.4-hexanediol. 2,3dimethyl-; 1.4-hexanediol. 2,4-dimethyl-: 1.4-hexanediol. 2.5-dimethyl-: 1.4-3,5hexanediol. 3.3-dimethyl-; 1.4-hexanediol. 3.4-dimethyl-; 1.4-hexanediol. dimethyl-: 1,3-hexanediol, 4.5-dimethyl-: 4,4-dimethyl-; 1,4-hexanediol, 1.4hexanediol. 5.5-dimethyl-: 1,5-hexanediol, 2.2-dimethyl-: 1.5-hexanediol, 2,3dimethyl-; 2,5-dimethyl-, 1.5-1,5-hexanediol, 2,4-dimethyl-; 1.5-hexanediol. hexanediol. 3,4-dimethyl-; 1,5-hexanediol, 3,5-3,3-dimethyl-; 1.5-hexanediol/ dimethyl-; 1,5-hexanediol, 4.5-dimethyl-: 1,6-hexanediol, 2,2-dimethyl-; 1,6hexanediol, 2,3-dimethyl-; 1.6-hexanediol. 2,4-dimethyl-; 1,6-hexanediol, 2,5dimethyl-; 1,6-hexanediol, 3,3-dimethyl-; 1,6-hexanediol, 3,4-dimethyl-; 2,4hexanediol, 2,3-dimethyl-; 2,4-hexanediol, 2,4-dimethyl-; 2,4-hexanediol, 2,5-2,4dimethyl-; 2,4-hexanediol, 3,3-dimethyl-; 2,4-hexanediol, 3,4-dimethyl-; hexanediol, 3,5-dimethyl-; 2,4-hexanediol. 4,5-dimethyl-; 2,4-hexanediol, 5,5dimethyl-; 2.5-hexanediol 2.3-dimethyl-; 2.5-hexanediol. 2.4-dimethyl-. 2,5hexanediol, 2,5-dimethyl-; 2,5-hexanediol, 3,3-dimethyl-; 2,5-hexanediol, 3,4dimethyl-; 2,6-hexanediol, 3,3-dimethyl-; 1,3-hexanediol, 2-ethyl-; 1,3-hexanediol, 4ethyl-; 1,4-hexanediol, 2-ethyl-; 1,4-hexanediol, 4-ethyl-; 1,5-hexanediol, 2-ethyl-, 2,4-hexanediol, 3-ethyl-; 2,4-hexanediol, 4-ethyl-; 2,5-hexanediol, 3-ethyl-; 1,3heptanediol, 2-methyl-; 1,3-heptanediol, 3-methyl-; 1,3-heptanediol, 4-methyl-, 1,3heptanediol, 5-methyl-; 1,3-heptanediol, 6-methyl-; 1,4-heptanediol, 2-methyl-, 1,4heptanediol, 3-methyl-; 1,4-heptanediol, 4-methyl-; 1,4-heptanediol, 5-methyl-; 1,4heptanediol, 6-methyl-; 1,5-heptanediol, 2-methyl-; 1,5-heptanediol, 3-methyl-, 1,5heptanediol, 4-methyl-; 1,5-heptanediol; 5-methyl-; 1,5-heptanediol, 6-methyl-; 1,6heptanediol, 2-methyl-; 1,6-heptanediol, 3-methyl-; 1,6-heptanediol, 4-methyl-, 1,6heptanediol, 5-methyl-; 1,6-heptanediol, 6-methyl-; 2,4-heptanediol, 2-methyl-; 2,4heptanediol, 3-methyl-; 2,4-heptanediol, 4-methyl-; 2,4-heptanediol, 5-methyl-; 2,4heptanediol, 6-methyl-; 2,5-heptanediol, 2-methyl-; 2,5-heptanediol, 3-methyl-; 2,5heptanediol, 4-methyl-; 2,5-heptanediol, 5-methyl-; 2,5-heptanediol, 6-methyl-; 2,6-heptanediol, 2-methyl-; 2,6-heptanediol, 3-methyl-; 3,5-heptanediol, 3-methyl-; 3,5-heptanediol, 3-methyl-; 3,5-heptanediol, 3-methyl-; 3,5-heptanediol, 4-methyl-; 2,4-octanediol; 2,5-octanediol; 2,6-octanediol; 2,7-octanediol; 3,5-octanediol; and/or 3,6-octanediol;

V. nonane diol isomers including: 2,4-pentanediol, 2,3,3,4-tetramethyl-; 2,4-pentanediol, 3-tertiarybutyl-; 2,4-hexanediol, 2,5,5-trimethyl-; 2,4-hexanediol, 3,3,5-trimethyl-; 2,4-hexanediol, 3,5,5-trimethyl-; 2,4-hexanediol, 3,5,5-trimethyl-; 2,4-hexanediol, 4,5,5-trimethyl-; 2,5-hexanediol, 3,3,4-trimethyl-; and/or 2,5-hexanediol, 3,3,5-trimethyl-;

VI. glyceryl ethers and/or di(hydroxyalkyl)ethers including: 1,2-propanediol, 3-(n-pentyloxy)-; 1,2-propanediol, 3-(2-pentyloxy)-; 1,2-propanediol, 3-(3-pentyloxy)-; 1,2-propanediol, 3-(2-methyl-1-butyloxy)-; 1,2-propanediol, 3-(iso-amyloxy)-; 1,2propanediol, 3-(3-methyl-2-butyloxy)-; 1,2-propanediol, 3-(cyclohexyloxy)-; 1,2propanediol, 3-(1-cyclohex-1-enyloxy)-; 1,3-propanediol, 2-(pentyloxy)-; 1,3propanediol, 2-(2-pentyloxy)-; 1,3-propanediol, 2-(3-pentyloxy)-; 1,3-propanediol, 2-(2-methyl-1-butyloxy)-; 1,3-propanediol, 2-(iso-amyloxy)-; 1,3-propanediol, 2-(3methyl-2-butyloxy)-; 1,3-propanediol, 2-(cyclohexyloxy)-; 1,3-propanediol, 2-(1cyclohex-1-enyloxy)-; 1,2-propanediol, 3-(butyloxy)-, triethoxylated; propanediol, 3-(butyloxy)-, tetraethoxylated; 1,2-propanediol, 3-(butyloxy)-, pentaethoxylated; 1,2-propanediol, 3-(butyloxy)-, hexaethoxylated; 1,2-propanediol, 3-(butyloxy)-, heptaethoxylated; 1,2-propanediol, 3-(butyloxy)-, octaethoxylated; and/or 1,2-propanediol, 3-(butyloxy)-,/nonaethoxylated;

VII. saturated and unsaturated alicyclic diols and their derivatives including:

(a) the saturated diols and their derivatives, including: 1-isopropyl-1,2-cyclobutanediol; 3-ethyl-4-methyl-1,2-cyclobutanediol; 3-propyl-1,2cyclobutanediol; 3-isopropyl-1,2/cyclobutanediol; 1-ethyl-1,2-cyclopentanediol; 1,2dimethyl-1,2-cyclopentanediol; 1,4-dimethyl-1,2-cyclopentanediol; 2,4,5-trimethyl-3,3-dimethyl-1,2-cyclopentanediol, 3.4-dimethyl-1.2-1,3-cyclopentanediol; cyclopentanediol; 3,5-dimethyl-1,2-cyclopentanediol; 3-ethyl-1,2-cyclopentanediol, 4,4-dimethyl-1,2-cyclopentanediol; 4-ethyl-1,2-cyclopentanediol; 1.1bis(hydroxymethyl)cyclohexane; 1,2-bis(hydroxymethyl)cyclohexane; 1,2-dimethyl-/1,3-bis(hydroxymethyl)cyclohexane; 1,3-dimethyl-1,3-1.3-cyclohexanediol; cyclohexanediol; 1,6-dimethyl-1,3-cyclohexanediol; 1-hydroxy-cyclohexaneethanol; 1-ethyl-1,3-cyclohexanediol; 1-methyl-1,2-1-hydroxy-cyclohexanemethanol; 2.3-dimethyl-1.4cyclohexanediol; 2,2-dimethyl-1,3-cyclohexanediol; 2,4-dimethyl-1,3-cyclohexanediol; 2.5-dimethyl-1.3cyclohexanediol;

cyclohexanediol, 2,6-dimethyl-1,4-cyclohexanediol, 2-ethyl-1,3-cyclohexanediol, 2hydroxycyclohexaneethanol; 2-hydroxyethyl-1-cyclohexanol; hydroxymethylcyclohexanol; 3-3-hydroxyethyl-1-cyclohexanol; hydroxycyclohexaneethanol; 3-hydroxymethylcyclohexanol; 3-methyl-1.2-4.4-dimethyl-1,3-cyclohexanediol; cyclohexanediol; 4.5-dimethyl-1.3cyclohexanediol; 4,6-dimethyl-1,3-cyclohexanediol; 4-ethyl-1,3-cyclohexanediol; 4hydroxyethyl-1-cyclohexanol; 4-hydroxymethylcyclohexanol; 4-methyl-1.2cyclohexanediol; 5,5-dimethyl-1,3-cyclohexanediol; 5-ethyl-1,3-cyclohexanediol; 1,2cycloheptanediol; 2-methyl-1,3-cycloheptanediol; 2-methyl-1,4-cycloheptanediol; 4methyl-1,3-cycloheptanediol: 5-methyl-1,3-cycloheptanediok 5-methyl-1,4-6-methyl-1,4-cycloheptanediol; cycloheptanediol; 1,3-c/clooctanediol; 1,4cyclooctanediol; 1.5-cyclooctanediol; diethoxylate; 1,2-cyclohexanedio/ 1,2cyclohexanediol. triethoxylate; 1,2-cyclohexanediol, tetraethoxylate; 1,2cyclohexanediol, pentaethoxylate; 1,2-cyclohexanedigf, hexaethoxylate; 1,2cyclohexanediol. heptaethoxylate; 1,2-cyclohexanodiol, octaethoxylate; 1,2cyclohexanediol, nonaethoxylate; 1,2-cyclohexanediol, monopropoxylate; 1,2cyclohexanediol, monobutylenoxylate; 1,2-cyclohexanediol, dibutylenoxylate; and/or 1,2-cyclohexanediol, tributylenoxylate; and (b) the unsaturated alicyclic diols including: 1,2-cyclobutanediol, 1-ethenyl-2-ethyl-; 3-cyclobutene-1,2-diol, 1,2,3,4-tetramethyl-; 3-cyclobutene-1,2-diol, 3,4-diethyl-; 3cyclobutene-1,2-diol, 3-(1,1-dimethylethyl)-; 3-cyclobutene-1,2-diol, 3-butyl-; 1,2cyclopentanediol 1,2-dimethyl-4-methylene-; 1,2-cyclopentanediol, methylene-; 1,2-cyclopentanediol, 4-(1-propenyl); 3-cyclopentene-1,2-diol, 1-ethyl-3-1,2-cyclohexanedigl, l-ethenyl-; 1,2-cyclohexanediol, methylene-, 1,2-cyclohexanediol, 1-methyl-4-methylene-, 1,2-cyclohexanediol, 3ethenyl-, 1,2-cyclohexanediol, 4-ethenyl-, 3-cyclohexene-1,2-diol, 2,6-dimethyl-, 3cyclohexene-1,2-diol, 6,6-dimethyl-; 4-cyclohexene-1,2-diol, 3,6-dimethyl-; 4cyclohexene-1,2-diol, 4,5-dimethyl-; 3-cyclooctene-1,2-diol; 4-cyclooctene-1,2-diol, and/or 5-cycloogtene-1,2-diol;

VIII. Alkoxylated derivatives of C<sub>3-8</sub> diols including:

1. 1,2-propanediol (C3) 2(Me- $E_{11-14}$ ); 1,2-propanediol (C3) PO<sub>4</sub>; 1,2-propanediol (C3) BO<sub>1</sub>; 1,2-propanediol, 2-methyl- (C4) (Me- $E_{4-10}$ ); 1,2-propanediol, 2-methyl- (C4) 2(Me- $E_{1}$ ); 1,2-propanediol, 2-methyl- (C4) PO<sub>3</sub>; 1,2-propanediol, 2-methyl- (C4) n-BO<sub>1-2</sub>; 1,3-propanediol (C3) 2(Me- $E_{6-8}$ ); 1,3-propanediol (C3) PO<sub>5-6</sub>; 1,3-propanediol, 2,2-diethyl- (C7) E<sub>1-7</sub>; 1,3-propanediol, 2,2-diethyl- (C7) PO<sub>1</sub>; 1,3-propanediol, 2,2-diethyl- (C5) PO<sub>3-4</sub>; 1,3-propanediol, 2,2-dimethyl- (C5) PO<sub>3-</sub>

propanediol, 2-(1-methylpropyl)- (C7) E<sub>1-7</sub>; 1,3-propanediol, 2-(1-methylpropyl) (C7) PO<sub>1</sub>; 1,3-propanediol, 2-(1-methylpropyl)- (C7) n-BO<sub>1-2</sub>; 1,3-propanediol/2-(2-methylpropyl)- (C7)  $E_{1-7}$ ; 1,3-propanediol, 2-(2-methylpropyl)- (C7)  $PO_{1}/1$ ,3propanediol, 2-(2-methylpropyl)- (C7) n-BO<sub>1-2</sub>; 1,3-propanediol, 2-ethyl- (Ø5) (Me E<sub>6-10</sub>); 1,3-propanediol, 2-ethyl- (C5) 2(Me E<sub>1</sub>); 1,3-propanediol, 2-ethyl- (C5) PO<sub>3</sub>; 1,3-propanediol, 2-ethyl- (C5) BO<sub>1</sub>; 1,3-propanediol, 2-ethyl-2-methyl- (C6) (Me E<sub>1-6</sub>); 1,3-propanediol, 2-ethyl-2-methyl- (C6) PO<sub>2</sub>; 1,3-propanediol, 2-ethyl-2methyl- (C6) BO<sub>1</sub>; 1,3-propanediol, 2-isopropyl- (C6) (Me E<sub>1-6</sub>), 1,3-propanediol, 2-isopropyl- (C6) PO<sub>2</sub>; 1,3-propanediol, 2-isopropyl- (C6) BO<sub>1</sub>;/1,3-propanediol, 2methyl- (C4) 2(Me  $E_{2-5}$ ); 1,3-propanediol, 2-methyl- (C4)  $P\emptyset_{4-5}$ ; 1,3-propanediol, 2-methyl- (C4) BO<sub>2</sub>; 1,3-propanediol, 2-methyl-2-isopropyl- (C7) E<sub>2-9</sub>; 1,3propanediol, 2-methyl-2-isopropyl- (C7) PO1; 1,3-propanediol, 2-methyl-2isopropyl- (C7) n-BO<sub>1-3</sub>; 1,3-propanediol, 2-methyl-2-propyl- (C7) E<sub>1-7</sub>; 1,3propanediol, 2-methyl-2-propyl- (C7) PO1; 1,3-propanediol, 2-methyl-2-propyl-(C7) n-BO<sub>1-2</sub>; 1,3-propanediol, 2-propyl- (C6) (Me E<sub>11-14</sub>); 1,3-propanediol, 2propyl- (C6) PO<sub>2</sub>; 1,3-propanediol, 2-propyl- (C6) BO<sub>1</sub>;

1,2-butanediol (C4) (Me  $E_{2-8}$ ); 1,2-butanediol (C4)  $PO_{2-3}$ ; 1,2-2. butanediol (C4) BO<sub>1</sub>; 1,2-butanediol, 2,3-dimethyl- (C6) E<sub>1-6</sub>; 1,2-butanediol, 2,3dimethyl- (C6) BO<sub>1-2</sub>; 1,2-butanediol, 2-ethyl- (C6) E<sub>1-3</sub>; 1,2-butanediol, 2-ethyl-(C6) BO<sub>1</sub>; 1,2-butanediol, 2-methyl- (C5) (Me E<sub>1-2</sub>); 1,2-butanediol, 2-methyl- (C5) PO<sub>1</sub>; 1,2-butanediol, 3,3-dimethyl- (C6) E<sub>1-6</sub>; 1,2-butanediol, 3,3-dimethyl- (C6)  $BO_{1-2}$ ; 1,2-butanediol, 3-methyl- (C5) (Me  $E_{1-2}$ ); 1,2-butanediol, 3-methyl- (C5) PO; 1,3-butanediol (C4) 2(Me E<sub>11-14</sub>); 1,3-butanediol (C4) PO<sub>5</sub>; 1,3-butanediol (C4) BO<sub>2</sub>; 1,3-butanediol, 2,2,3-trimethyl- (C7) (Me E<sub>1-3</sub>); 1,3-butanediol, 2,2,3trimethyl- (C7) PO<sub>1-2</sub>; 1,3-butanediol, 2,2-dimethyl- (C6) (Me E<sub>3-8</sub>); 1,3butanediol, 2,2-dimethyl- (C6) PO $_3$ ; 1,3-butanediol, 2,3-dimethyl- (C6) (Me E<sub>3-8</sub>); 1,3-butanediol, 2,3-dimethyl- (C6) PO<sub>3</sub>; 1,3-butanediol, 2-ethyl- (C6) (Me E<sub>1-6</sub>), 1,3-butanediol, 2-ethyl- (C6) PO<sub>2-3</sub>; 1,3-butanediol, 2-ethyl- (C6) BO<sub>1</sub>; 1,3butanediol, 2-ethyl--2-methyl- (C7) (Me E1); 1,3-butanediol, 2-ethyl--2-methyl- (C7) PO<sub>1</sub>; 1,3-butanediol, 2-ethyl-2-methyl- (C7) n-BO<sub>2-4</sub>; 1,3-butanediol, 2-ethyl-3methyl- (C7) (Me E<sub>1</sub>); 1,3-butanediol, 2-ethyl-3-methyl- (C7) PO<sub>1</sub>; 1,3-butanediol, 2-ethyl-3-methyl- (C7) n-BO<sub>2-4</sub>; 1,3-butanediol, 2-isopropyl- (C7) (Me E<sub>1</sub>); 1,3butanediol, 2-isopropyl- (C7) PO1; 1,3-butanediol, 2-isopropyl- (C7) n-BO2-4; 1,3butanediol, 2-methyl- (C5) 2(Me E<sub>1-3</sub>); 1,3-butanediol, 2-methyl- (C5) PO<sub>4</sub>; 1,3butanediol, 2-propyl- (C7) E<sub>2-9</sub>; 1,3-butanediol, 2-propyl- (C7) PO<sub>1</sub>; 1,3-butanediol, 2-propyl- (C7) n-BO<sub>1-3</sub>; 1,3-butanediol, 3-methyl- (C5) 2(Me E<sub>1-3</sub>); 1,3-butanediol, 3-methyl- (C5) PO<sub>4</sub>; 1,4-butanediol (C4) 2(Me E<sub>2-4</sub>); 1,4-butanediol (C4) PO<sub>4-5</sub>;

1,4-butanediol (C4) BO<sub>2</sub>; 1,4-butanediol, 2,2,3-trimethyl- (C7) E<sub>2-9</sub>; 1,4-butanediol, 2,2,3-trimethyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 2,2,3-trimethyl- (C7)  $n-BO_{1-3}$ ; 1,4butanediol, 2,2-dimethyl- (C6) (Me E<sub>1-6</sub>); 1,4-butanediol, 2,2-dimethyl- (C6) PO<sub>2</sub>; 1,4-butanediol, 2,2-dimethyl- (C6) BO<sub>1</sub>; 1,4-butanediol, 2,3-dimethyl- (C6) (Me E<sub>1</sub>-6); 1,4-butanediol, 2,3-dimethyl- (C6) PO2; 1,4-butanediol, 2,3-dimethyl- (C6) BO1; 1,4-butanediol, 2-ethyl- (C6) (Me E<sub>11-14</sub>); 1,4-butanediol, 2-ethyl- (C6) PO<sub>2</sub>; 1,4butanediol, 2-ethyl- (C6) BO<sub>1</sub>; 1,4-butanediol, 2-ethyl-2-methyl- (C7) E<sub>1-7</sub>; 1,4butanediol, 2-ethyl-2-methyl- (C7) PO1, 1,4-butanediol, 2-ethyl-2-methyl- (C7) n- $BO_{1-2}$ ; 1,4-butanediol, 2-ethyl-3-methyl- (C7)  $E_{1-7}$ ; 1,4-butanediol, 2-ethyl-3methyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 2-ethyl-3-methyl- (C7)/n-BO<sub>1-2</sub>; 1,4-butanediol, 2-isopropyl- (C7) E<sub>1-7</sub>; 1,4-butanediol, 2-isopropyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 2isopropyl- (C7) n-BO<sub>1-2</sub>; 1,4-butanediol, 2-methyl- (C5) (Me  $E_{6-10}$ ); 1,4butanediol, 2-methyl- (C5) 2(Me E1); 1,4-butanediol, 2-methyl- (C5) PO3; 1,4butanediol, 2-methyl- (C5) BO<sub>1</sub>; 1,4-butanediol, 2-propyl- (C7) E<sub>1-5</sub>; 1,4butanediol, 2-propyl- (C7) n-BO<sub>1-2</sub>; 1,4-butanediol, 3-ethyl-1-methyl- (C7) E<sub>2-9</sub>; 1,4-butanediol, 3-ethyl-1-methyl- (C7) PO<sub>1</sub>;/1,4-butanediol, 3-ethyl-1-methyl- (C7) n-BO<sub>1-3</sub>; 2,3-butanediol (C4) (Me  $E_{1-6}$ ); 2,3-butanediol (C4) 2(Me  $E_{1}$ ); 2,3butanediol (C4) PO<sub>3-4</sub>; 2,3-butanediol (C4) BO<sub>1</sub>; 2,3-butanediol, 2,3-dimethyl- (C6) E<sub>3-9</sub>; 2,3-butanediol, 2,3-dimethyl- (C6) PO<sub>1</sub>; 2,3-butanediol, 2,3-dimethyl- (C6)  $BO_{1-3}$ , 2,3-butanediol, 2-methyl- ( $\mathbb{C}^5$ ) (Me  $E_{1-5}$ ); 2,3-butanediol, 2-methyl- ( $\mathbb{C}^5$ ) 2PO<sub>2</sub>; 2,3-butanediol, 2-methyl- (Q5) n-BO<sub>1</sub>; 2,3-butanediol, 2-methyl- (C5) BO<sub>1</sub>;

1,2-pentanediol (C5)  $E_{3-10}$ ; 1,2-pentanediol, (C5)  $PO_1$ ; 1,2pentanediol, (C5) n-BO<sub>2-3</sub>; 1,2-pentanediol, 2-methyl (C6) E<sub>1-3</sub>; 1,2-pentanediol, 2methyl (C6) n-BO<sub>1</sub>; 1,2-pentanediol, 2-methyl (C6) BO<sub>1</sub>; 1,2-pentanediol, 3-methyl (C6) E<sub>1-3</sub>; 1,2-pentanediól, 3-methyl (C6) n-BO<sub>1</sub>; 1,2-pentanediól, 3-methyl (C6) BO<sub>1</sub>; 1,2-pentanediol, 4-methyl (C6) E<sub>1-3</sub>; 1,2-pentanediol, 4-methyl (C6) n-BO<sub>1</sub>; 1,2-pentanediol, 4-methyl (C6) BO<sub>1</sub>; 1,3-pentanediol (C5) 2(Me-E<sub>1-2</sub>); 1,3pentanediol (C5)  $PO_{3-4}$ ; 1,3-pentanediol, 2,2-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3pentanediol, 2,2-dimethyl- (C7) PO<sub>1</sub>, 1,3-pentanediol, 2,2-dimethyl- (C7) n-BO<sub>2-4</sub>, 1,3-pentanediol, 2,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 2,3-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3-pentanediol, 2,4-dimethyl-(C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 2,4-dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 2,4dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3-pentanediol, 2-ethyl- (C7) E<sub>2-9</sub>; 1,3-pentanediol, 2ethyl-(C7) PO<sub>1</sub>; 1,3-pentanediol, 2-ethyl- (C7) n-BO<sub>1-3</sub>; 1,3-pentanediol, 2-methyl-(C6) 2(Me-E<sub>1-6</sub>); 1,3-pentanediol, 2-methyl- (C6) PO<sub>2-3</sub>; 1,3-pentanediol, 2methyl- (C6) n-BO<sub>1</sub>; 1,3-pentanediol, 2-methyl- (C6) BO<sub>1</sub>; 1,3-pentanediol, 3,4dimethyl- (C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 3,4-dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol,

3,4-dimethyl- (C7) n-BO<sub>2-4</sub>, 1,3-pentanediol, 3-methyl- (C6)  $2(Me-E_{1-6})$ , 1,3pentanediol, 3-methyl- (C6) PO<sub>2-3</sub>; 1,3-pentanediol, 3-methyl- (C6) n-BO<sub>1</sub>; 1,3pentanediol, 3-methyl- (C6) BO<sub>1</sub>; 1,3-pentanediol, 4,4-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3pentanediol, 4,4-dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 4,4-dimethyl- (C7) n-BO<sub>2-4</sub>, 1,3-pentanediol, 4-methyl- (C6) 2(Me-E<sub>1-6</sub>); 1,3-pentanediol, 4-methyl- (C6) PO<sub>2</sub>-3, 1,3-pentanediol, 4-methyl- (C6) BO<sub>1</sub>; 1,4-pentanediol, (C5)  $\frac{1}{2}$  (Me-E<sub>1-2</sub>); 1,4pentanediol (C5)  $PO_{3-4}$ ; 1,4-pentanediol, 2,2-dimethyl- (Q7) (Me-E<sub>1</sub>); 1,4pentanediol, 2,2-dimethyl- (C7) PO<sub>1</sub>, 1,4-pentanediol, 2,2-dimethyl- (C7) n-BO<sub>2-4</sub>, 1,4-pentanediol, 2,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 2,3-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 2,4-dimethyl-(C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 2,4-dimethyl- (C7)  $PO_1$ ; 1,4-pentanediol, 2,4dimethyl- (C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 2-methyl- (C6) (Me- $E_{1-6}$ ), 1,4pentanediol, 2-methyl- (C6) PO<sub>2-3</sub>; 1,4-pentanediol, /2-methyl- (C6) n-BO<sub>1</sub>; 1,4pentanediol, 2-methyl- (C6) BO<sub>1</sub>; 1,4-pentanediol, 3,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4pentanediol, 3,3-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 3,3-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 3,4-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 3,4-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 3,4-dimethyl- (C7) n-BO<sub>2</sub>/4; 1,4-pentanediol, 3-methyl- (C6)  $2(Me-E_{1-6})$ ; 1,4-pentanediol, 3-methyl- (C6)  $PO_{2-3}$ ; 1,4-pentanediol, 3-methyl-(C6) BO<sub>1</sub>, 1,4-pentanediol, 4-methyl- (C6) 2(Me-E<sub>1-6</sub>); 1,4-pentanediol, 4-methyl-(C6) PO<sub>2-3</sub>; 1,4-pentanediol, 4-methyl- (C6)/BO<sub>1</sub>; 1,5-pentanediol, (C5) (Me-E<sub>4-</sub> 10), 1,5-pentanediol (C5) 2(Me-E<sub>1</sub>), 1,5-pentanediol (C5) PO<sub>3</sub>, 1,5-pentanediol, 2,2-dimethyl- (C7) E<sub>1-7</sub>; 1,5-pentanediol, 2,2-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 2,2-dimethyl- (C7) n-BO<sub>1-2</sub>; 1,5-pentanediol, 2,3-dimethyl- (C7) E<sub>1-7</sub>, 1,5pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 2,3-dimethyl- (C7) n-BO<sub>1-2</sub>. 1,5-pentanediol, 2,4-dimethyl- (C7)  $E_{1-1}$ , 1,5-pentanediol, 2,4-dimethyl- (C7)  $PO_1$ , 1,5-pentanediol, 2,4-dimethyl- (C7) n- $BO_{1-2}$ ; 1,5-pentanediol, 2-ethyl- (C7)  $E_{1-5}$ . 1,5-pentanediol, 2-ethyl- (C7) n-BO $_{1}/_{2}$ ; 1,5-pentanediol, 2-methyl- (C6) (Me-E $_{11}$ -14); 1,5-pentanediol, 2-methyl- (C6)/PO<sub>2</sub>; 1,5-pentanediol, 3,3-dimethyl- (C7) E<sub>1-7</sub>. 1,5-pentanediol, 3,3-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 3,3-dimethyl- (C7) n-BO<sub>1-2</sub>; 1,5-pentanediol, 3-methyl- (C6) (Me-E<sub>11-14</sub>); 1,5-pentanediol, 3-methyl-(C6) PO<sub>2</sub>; 2,3-pentanediol, (C5) (Me- $E_{1-3}$ ); 2,3-pentanediol, (C5) PO<sub>2</sub>; 2,3pentanediol, 2-methyl- (C6)  $E_{1-7}$ ; 2,3-pentanediol, 2-methyl- (C6) PO<sub>1</sub>; 2,3pentanediol, 2-methyl- (C6) n/BO<sub>1-2</sub>; 2,3-pentanediol, 3-methyl- (C6) E<sub>1-7</sub>; 2,3pentanediol, 3-methyl- (C6) PO<sub>1</sub>; 2,3-pentanediol, 3-methyl- (C6) n-BO<sub>1-2</sub>; 2,3pentanediol, 4-methyl- (C6) E<sub>1-7</sub>; 2,3-pentanediol, 4-methyl- (C6) PO<sub>1</sub>; 2,3pentanediol, 4-methyl- (C6) n-BO<sub>1-2</sub>; 2,4-pentanediol, (C5) 2(Me-E<sub>11-14</sub>); 2,4pentanediol (C5) PO<sub>4</sub>; 2,4-pentanediol, 2,3-dimethyl- (C7) (Me-E<sub>11-14</sub>); 2,4-

pentanediol, 2,3-dimethyl- (C7) PO<sub>2</sub>; 2,4-pentanediol, 2,4-dimethyl- (C7) (Me-E<sub>11-14</sub>); 2,4-pentanediol, 2,4-dimethyl- (C7) PO<sub>2</sub>; 2,4-pentanediol, 2-methyl- (C7) (Me-E<sub>5-10</sub>); 2,4-pentanediol, 2-methyl- (C7) PO<sub>3</sub>; 2,4-pentanediol, 3,3-dimethyl- (C7) (Me-E<sub>11-14</sub>); 2,4-pentanediol, 3,3-dimethyl- (C7) PO<sub>2</sub>; 2,4-pentanediol, 3-methyl- (C6) (Me-E<sub>5-10</sub>); 2,4-pentanediol, 3-methyl- (C6) PO<sub>3</sub>;

1,3-hexanediol (C6) (Me-E<sub>1-5</sub>) 1,3-hexanediol (C6) PO<sub>2</sub>; 1,3hexanediol (C6) BO<sub>1</sub>; 1,3-hexanediol, 2-methyl- (C7) E<sub>2-9</sub>; 1,3-hexanediol, 2methyl- (C7) PO<sub>1</sub>; 1,3-hexanediol, 2-methyl- (C7) n-BO<sub>1-3</sub>; 1,3-hexanediol, 2methyl- (C7) BO<sub>1</sub>; 1,3-hexanediol, 3-methyl- (C7) E<sub>2-9</sub>; 1,3-hexanediol, 3-methyl-(C7) PO<sub>1</sub>; 1,3-hexanediol, 3-methyl- (C7) n-BO<sub>1-3</sub>; 1,3-hexanediol, 4-methyl- (C7) E<sub>2-9</sub>; 1,3-hexanediol, 4-methyl- (C7) PO<sub>1</sub>; 1,3-hexanediol, #-methyl- (C7) n-BO<sub>1-3</sub>; 1,3-hexanediol, 5-methyl- (C7) E<sub>2-9</sub>; 1,3-hexanediol, 5-methyl- (C7) PO<sub>1</sub>; 1,3hexanediol, 5-methyl- (C7) n-BO<sub>1-3</sub>; 1,4-hexanediol (C6) (Me-E<sub>1-5</sub>); 1,4-hexanediol (C6) PO<sub>2</sub>; 1,4-hexanediol (C6) BO<sub>1</sub>; 1,4-hexanediol, 2-methyl- (C7) E<sub>2-9</sub>; 1,4hexanediol, 2-methyl- (C7) PO<sub>1</sub>; 1,4-hexanediol, 2-methyl- (C7) n-BO<sub>1-3</sub>; 1,4hexanediol, 3-methyl- (C7) E<sub>2-9</sub>; 1,4-hexanediol, 3-methyl- (C7) PO<sub>1</sub>; 1,4hexanediol, 3-methyl- (C7) n-BO<sub>1-3</sub>; 1,4-hexanediol, 4-methyl- (C7) E<sub>2-9</sub>; 1,4hexanediol, 4-methyl- (C7) PO1; 1,4-hexanediol, 4-methyl- (C7) n-BO1-3; 1,4hexanediol, 5-methyl- (C7) E<sub>2-9</sub>; 1,4-hexanediol, 5-methyl- (C7) PO<sub>1</sub>; 1,4hexanediol, 5-methyl- (C7) n-BO<sub>1-3</sub>; 1,5-hexanediol (C6) (Me-E<sub>1-5</sub>); 1,5-hexanediol (C6) PO<sub>2</sub>; 1,5-hexanediol (C6) B $\emptyset$ <sub>1</sub>; 1,5-hexanediol, 2-methyl- (C7) E<sub>2-9</sub>; 1,5hexanediol, 2-methyl- (C7) PO<sub>1</sub>, 1,5-hexanediol, 2-methyl- (C7) n-BO<sub>1-3</sub>, 1,5hexanediol, 3-methyl- (C7)  $\cancel{E}_{2-9}$ ; 1,5-hexanediol, 3-methyl- (C7) PO<sub>1</sub>; 1,5hexanediol, 3-methyl- (C7) n-BO<sub>1-3</sub>, 1,5-hexanediol, 4-methyl- (C7) E<sub>2-9</sub>, 1,5hexanediol, 4-methyl- (C7) PO<sub>1</sub>; 1,5-hexanediol, 4-methyl- (C7) n-BO<sub>1-3</sub>; 1,5hexanediol, 5-methyl-/(C7)  $E_{2-9}$ ; 1,5-hexanediol, 5-methyl- (C7)  $PO_1$ ; 1,5hexanediol, 5-methyl-/(C7) n-BO<sub>1-3</sub>; 1,6-hexanediol (C6) (Me-E<sub>1-2</sub>); 1,6-hexanediol (C6) PO<sub>1-2</sub>; 1,6-hexanediol (C6) n-BO<sub>4</sub>; 1,6-hexanediol, 2-methyl- (C7) E<sub>1-5</sub>, 1,6hexanediol, 2-methyl- (C7) n-BO<sub>1-2</sub>; 1,6-hexanediol, 3-methyl- (C7) E<sub>1-5</sub>; 1,6hexanediol, 3-methyl- (C7) n-BO<sub>1-2</sub>; 2,3-hexanediol (C6) E<sub>1-5</sub>; 2,3-hexanediol (C6) n-BO<sub>1</sub>; 2,3-hexanediol (C6) BO<sub>1</sub>; 2.4-hexanediol (C6) (Me-E<sub>3-8</sub>); 2,4-hexanediol (C6) PO<sub>2</sub>/2,4-hexanediol, 2-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 2-methyl- (C7)  $PO_{1-2}/2$ ,4-hexanediol, 3-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 3-methyl- (C7)  $PO_{1-2}$ ; 2,4-hexanediol, 4-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 4-methyl- (C7)  $PO_{1-2}$ ; 2,4-hexanediol, 5-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 5-methyl- (C7) PO<sub>1-2</sub>; 2,5-hexanediol (C6) (Me-E<sub>3-8</sub>); 2,5-hexanediol (C6) PO<sub>3</sub>; 2,5-hexanediol, 2methyl- (C7) (Me-E<sub>1-2</sub>); 2,5-hexanediol 2-methyl- (C7) PO<sub>1-2</sub>; 2,5-hexanediol, 3methyl- (C7) (Me-E<sub>1-2</sub>); 2,5-hexanediol 3-methyl- (C7) PO<sub>1-2</sub>; 3,4-hexanediol (C6) EO<sub>1-5</sub>; 3,4-hexanediol (C6) n-BO<sub>1</sub>; 3,4-hexanediol (C6) BO<sub>1</sub>;

- 5. 1,3-heptanediol (C7)  $E_{1-7}$ ; 1,3-heptanediol (C7)  $PO_1$ ; 1,3-heptanediol (C7)  $PO_{1-2}$ ; 1,4-heptanediol (C7)  $PO_{1-7}$ ; 1,4-heptanediol (C7)  $PO_{1-7}$ ; 1,4-heptanediol (C7)  $PO_{1-7}$ ; 1,5-heptanediol (C7)  $PO_{1-7}$ ; 1,5-heptanediol (C7)  $PO_{1-7}$ ; 1,5-heptanediol (C7)  $PO_{1-7}$ ; 1,6-heptanediol (C7)  $PO_{1-7}$ ; 1,6-heptanediol (C7)  $PO_{1-7}$ ; 1,6-heptanediol (C7)  $PO_{1-7}$ ; 1,6-heptanediol (C7)  $PO_{1-7}$ ; 1,7-heptanediol (C7)  $PO_{1-7}$ ; 1,7-heptanediol (C7)  $PO_{1-7}$ ; 1,7-heptanediol (C7)  $PO_{1-7}$ ; 1,7-heptanediol (C7)  $PO_{1-7}$ ; 2,4-heptanediol (C7)  $PO_{1-7}$ ; 2,4-heptanediol (C7)  $PO_{1-7}$ ; 2,5-heptanediol (C7)  $PO_{1-7}$ ; 2,5-heptanediol (C7)  $PO_{1-7}$ ; 2,5-heptanediol (C7)  $PO_{1-7}$ ; 2,5-heptanediol (C7)  $PO_{1-7}$ ; 2,6-heptanediol (C7)  $PO_{1-7}$ ; 3,5-heptanediol (PO<sub>1-7</sub>)  $PO_{1-7}$ ;
- 1,3-butanediol, 3-methyl-2-isopropyl- (Ø8) PO<sub>1</sub>; 2,4-pentanediol, 2,3,3-trimethyl- (C8) PO<sub>1</sub>; 1,3-butanediol, 2,2-diethyl- (C8)  $E_{2-5}$ ; 2,4-hexanediol, 2,3-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 2,4-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 2,5-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 3,3-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 3,4-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 3,5-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 4,5-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 5,5-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 2,3-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 2,4-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 2,5-dimethyl- (C8)  $E_{2-5}$ ; 2,5-hexanediol, 3,3-dimethyl- (C8)  $E_{2-5}$ ; 2,5-hexanediol, 3,4-dimethyl- (C8) E<sub>2-5</sub>; 3,5-heptanediol, 3/methyl- (C8) E<sub>2-5</sub>; 1,3-butanediol, 2,2diethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,3/dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,4-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,5-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4hexanediol, 3,3-dimethyl- (C8) n-BO<sub>1-2</sub>, 2,4-hexanediol, 3,4-dimethyl- (C8) n-BO<sub>1-</sub> 2; 2,4-hexanediol, 3,5-dimethyl- (C8)/n-BO<sub>1-2</sub>; 2,4-hexanediol, 4,5-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 5,5-dimethyl-, n-BO<sub>1-2</sub>; 2,5-hexanediol, 2,3-dimethyl-(C8) n-BO<sub>1-2</sub>; 2,5-hexanediol, 2,4-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,5-hexanediol, 2,5dimethyl- (C8) n-BO<sub>1-2</sub>; 2,5-hexanediol, 3,3-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,5hexanediol, 3,4-dimethyl- (C8) n-BO<sub>1-2</sub>; 3,5-heptanediol, 3-methyl- (C8) n-BO<sub>1-2</sub>. 1,3-propanediol, 2-(1,2-dimethylpropyl)- (C8) n-BO<sub>1</sub>; 1,3-butanediol, 2-ethyl-2,3dimethyl- (C8) n-BO<sub>1</sub>; 1,3-butanediol, 2-methyl-2-isopropyl- (C8) n-BO<sub>1</sub>; 1,4butanediol, 3-methyl-2-isopropyl- (C8) n-BO1; 1,3-pentanediol, 2,2,3-trimethyl-(C8) n-BO<sub>1</sub>; 1,3-pentanediol, 2,2,4-trimethyl- (C8) n-BO<sub>1</sub>; 1,3-pentanediol, 2,4,4trimethyl- (C8) n-BO<sub>1</sub>/ $^{\prime}$  1,3-pentanediol, 3,4,4-trimethyl- (C8) n-BO<sub>1</sub>; 1,4pentanediol, 2,2,3-trimethyl- (C8) n-BO<sub>1</sub>, 1,4-pentanediol, 2,2,4-trimethyl- (C8) n-BO<sub>1</sub>; 1,4-pentanediol, 2,3,3-trimethyl- (C8) n-BO<sub>1</sub>; 1,4-pentanediol, 2,3,4-trimethyl-

(C8) n-BO<sub>1</sub>, 1,4-pentanediol, 3,3,4-trimethyl- (C8) n-BO<sub>1</sub>, 2,4-pentanediol, 2,3,4trimethyl- (C8) n-BO<sub>1</sub>; 2,4-hexanediol, 4-ethyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 2methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 3-methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 4methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 5-methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 6methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 2-methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 3methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 4-methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 5methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 6-methyl- (C8) n-BO<sub>1</sub>; 2,6-heptanediol, 2methyl- (C8) n-BO<sub>1</sub>; 2,6-heptanediol, 3-methyl- (C8) n-BO<sub>1</sub>;/2,6-heptanediol, 4methyl- (C8) n-BO<sub>1</sub>; 3,5-heptanediol, 2-methyl- (C8) n-BO<sub>4</sub>; 1,3-propanediol, 2-(1,2-dimethylpropyl)- (C8)  $E_{1-3}$ ; 1,3-butanediol, 2-ethyl-2,3-dimethyl- (C8)  $E_{1-3}$ ; 1,3-butanediol, 2-methyl-2-isopropyl- (C8) E<sub>1-3</sub>; 1,4/butanediol, 3-methyl-2isopropyl- (C8)  $E_{1-3}$ ; 1,3-pentanediol, 2,2,3-trimethyl- (C8)  $E_{1-3}$ ; 1,3-pentanediol, 2,2,4-trimethyl- (C8)  $E_{1-3}$ ; 1,3-pentanediol, 2,4,4-trimethyl- (C8)  $E_{1-3}$ ; 1,3pentanediol, 3,4,4-trimethyl- (C8) E<sub>1-3</sub>; 1,4-pentanedjól, 2,2,3-trimethyl- (C8) E<sub>1-3</sub>; 1,4-pentanediol, 2,2,4-trimethyl- (C8) E<sub>1-3</sub>; 1,4-pentanediol, 2,3,3-trimethyl- (C8)  $E_{1-3}$ ; 1,4-pentanediol, 2,3,4-trimethyl- (C8)  $E_{1-3}$ , 1,4-pentanediol, 3,3,4-trimethyl-(C8)  $E_{1-3}$ ; 2,4-pentanediol, 2,3,4-trimethyl- (C8)  $E_{1-3}$ ; 2,4-hexanediol, 4-ethyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol, 2-methyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol, 3-methyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol, 4-methyl- (C8) E<sub>1-3</sub>; 2,4-heptanediol, 5-methyl- (C8) E<sub>1-3</sub>; 2,4heptanediol, 6-methyl- (C8)  $E_{1-3}$ , 2,5-heptanediol, 2-methyl- (C8)  $E_{1-3}$ , 2,5heptanediol, 3-methyl- (C8) E<sub>1-3</sub>, 2,5-heptanediol, 4-methyl- (C8) E<sub>1-3</sub>, 2,5heptanediol, 5-methyl- (C8)  $E_{1-3}$ ;  $\mathbb{Z}$ ,5-heptanediol, 6-methyl- (C8)  $E_{1-3}$ ; 2,6heptanediol, 2-methyl- (C8)  $E_{1-3}$ / 2,6-heptanediol, 3-methyl- (C8)  $E_{1-3}$ ; 2,6heptanediol, 4-methyl- (C8) E<sub>1-3</sub>; and/or 3,5-heptanediol, 2-methyl- (C8) E<sub>1-3</sub>; and

IX. aromatic diols including: 1-phenyl-1,2-ethanediol; 1-phenyl-1,2-propanediol; 2-phenyl-1,2-propanediol; 3-phenyl-1,2-propanediol; 1-(3-methylphenyl)-1,3-propanediol; 1-(4-methylphenyl)-1,3-propanediol; 2-methyl-1-phenyl-1,3-propanediol; 1-phenyl-1,3-butanediol; 3-phenyl-1,3-butanediol; 1-phenyl-1,4-butanediol; and/or 1-phenyl-2,3-butanediol; and

## X. mixtures thereof.

7.

mixtures thereof:

40. The composition of any of Claims 11-15 wherein said principal solvent is selected from the group consisting of:

1,3-Propanediol, 2,2-di-2-propenyl-; 1,3-Propanediol, 2-(1-pentenyl)-; 1,3-Propanediol, 2-(2-methyl-2-propenyl)-; 1,3-Propanediol, 2-(3-methyl-2-propenyl)-; 1,3-Propanediol, 2-(3-methyl-2-propenyl)

The state of the s earl. "Ľ sala  1-butenyl)-; 1,3-Propanediol, 2-(4-pentenyl)-; 1,3-Propanediol, 2-ethyl-2-(2-methyl-2-propenyl)-; 1,3-Propanediol, 2-ethyl-2-(2-propenyl)-; 1,3-Propanediol, 2-methyl-2-(3-methyl-3-butenyl)-; 1.3-Butanediol, 2.2-diallyl-; 1.3-Butanediol, 2-(1-ethyl-1propenyl)-; 1,3-Butanediol, 2-(2-butenyl)-2-methyl-; 1,3-Butanediol, 2-(3/methyl-2butenyl)-; 1,3-Butanediol, 2-ethyl-2-(2-propenyl)-; 1,3-Butanediol, 2-methyl-2-(1methyl-2-propenyl)-; 1,4-Butanediol, 2,3-bis(1-methylethylidene)-; 1/4-Butanediol, 2-(3-methyl-2-butenyl)-3-methylene-; 2-Butene-1,4-diol, 2-(1,1-dimethylpropyl)-; 2-Butene-1,4-diol, 2-(1-methylpropyl)-; 2-Butene-1,4-diol, 2-butyl-; 1,3-Pentanediol, 2-ethenyl-3-ethyl-; 1,3-Pentanediol, 2-ethenyl-4,4-dimethyl-; 1,4-Pentanediol, 3methyl-2-(2-propenyl)-; 1,5-Pentanediol, 2-(1-propenyl)-; 1,5-Pentanediol, 2-(2propenyl)-; 1,5-Pentanediol, 2-ethylidene-3-methyl-; 1,5-Pentanediol, 2-propylidene-; 2,4-Pentanediol, 3-ethylidene-2,4-dimethyl-; 4-Pentene-1,3-diol, 2-(1,1dimethylethyl)-; 4-Pentene-1,3-diol, 2-ethyl-2,3-dimethyl-/ 1,4-Hexanediol, 4-ethyl-2-methylene-; 1,5-Hexadiene-3,4-diol, 2,3,5-trimethyl-;/1,5-Hexadiene-3,4-diol, 5ethyl-3-methyl-; 1,5-Hexanediol, 2-(1-methylethenyl)-; 1,6-Hexanediol, 2-ethenyl-; 1-Hexene-3,4-diol, 5,5-dimethyl-; 1-Hexene-3,4-diol, /5,5-dimethyl-; 2-Hexene-1,5diol, 4-ethenyl-2,5-dimethyl-; 3-Hexene-1,6-diol, 2-ethenyl-2,5-dimethyl-; 3-Hexene-1,6-diol, 2-ethyl-; 3-Hexene-1,6-diol, 3,4-dimethyl-; 4-Hexene-2,3-diol, 2,5dimethyl-; 4-Hexene-2,3-diol, 3,4-dimethyl-; 5-Hexene-1,3-diol, 3-(2-propenyl)-; 5-Hexene-2,3-diol, 2,3-dimethyl-; 5-Hexene-2,3-diol, 3,4-dimethyl-; 5-Hexene-2,3diol, 3,5-dimethyl-; 5-Hexene-2,4-diol, 3-ethenyl-2,5-dimethyl-; 1,4-Heptanediol, 6methyl-5-methylene-; 1,5-Heptadiene-3,4-djól, 2,3-dimethyl-; 1,5-Heptadiene-3,4diol, 2,5-dimethyl-; 1,5-Heptadiene-3,4-diol, 3,5-dimethyl-; 1,7-Heptanediol, 2,6bis(methylene)-; 1,7-Heptanediol, 4-methylene-; 1-Heptene-3,5-diol, 2,4-dimethyl-; 1-Heptene-3,5-diol, 2,6-dimethyl-; 1-Heptene-3,5-diol, 3-ethenyl-5-methyl; 1-Heptene-3,5-diol, 6,6-dimethyl-, 2,4-Heptadiene-2,6-diol, 4,6-dimethyl-, 2,5-Heptadiene-1,7-diol, 4,4-dimethyl-; 2,6-Heptadiene-1,4-diol, 2,5,5-trimethyl-; 2-Heptene-1,4-diol, 5,6-dimethyl-; 2-Heptene-1,5-diol, 5-ethyl-; 2-Heptene-1,7-diol, 2methyl-; 3-Heptene-1,5-diol, 4,6-dimethyl-; 3-Heptene-1,7-diol, 3-methyl-6methylene-; 3-Heptene-2,5-diol, 2,4-dimethyl-; 3-Heptene-2,5-diol, 2,5-dimethyl-; 3-Heptene-2.6-diol, 2.6-dimethyl-2.4 3-Heptene-2.6-diol, 4.6-dimethyl-; 5-Heptene-1.3diol, 2,4-dimethyl-, 5-Heptene-1,3-diol, 3,6-dimethyl-, 5-Heptene-1,4-diol, 2,6dimethyl-: 5-Heptene-1,4-diol, 3,6-dimethyl-; 5-Heptene-2,4-diol, 2,3-dimethyl-; 6-Heptene-1.3-diol. 2,2-dimethyl-, 6-Heptene-1,4-diol, 4-(2-propenyl)-, 6-Heptene-1,4-diol, 5,6-dimethyl-; 6-Heptene-1,5-diol, 2,4-dimethyl-; 6-Heptene-1,5-diol, 2ethylidene-6-methyl-; 6-Heptene-2,4-diol, 4-(2-propenyl)-; 6-Heptene-2,4-diol, 5,5dimethyl-; 6-Heptene-2,5-diol, 4,6-dimethyl-; 6-Heptene-2,5-diol, 5-ethenyl-4-

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methyl-, 1,3-Octanediol, 2-methylene-, 1,6-Octadiene-3,5-diol, 2,6-dimethyl-, 1,6-Octadiene-3,5-diol, 3,7-dimethyl-; 1,7-Octadiene-3,6-diol, 2,6-dimethyl-; 1,7-Octadiene-3,6-diol, 2,7-dimethyl-; 1,7-Octadiene-3,6-diol, 3,6-dimethyl-; 1-Octene-3,6-diol, 3-ethenyl-; 2,4,6-Octatriene-1,8-diol, 2,7-dimethyl-; 2,4-Octadiene-1,7-diol, 3,7-dimethyl-; 2,5-Octadiene-1,7-diol, 2,6-dimethyl-; 2,5-Octadiene-1,7-diol, 3,7dimethyl-; 2,6-Octadiene-1,4-diol, 3,7-dimethyl- (Rosiridol); 2,6-Octadiene-1,8-diol, 2-methyl-; 2,7-Octadiene-1,4-diol, 3,7-dimethyl-; 2,7-Octadiene-1,5-diol, 2,6dimethyl-; 2,7-Octadiene-1,6-diol, 2,6-dimethyl- (8-Hydroxylinalool); 2,7-Octadiene-1,6-diol, 2,7-dimethyl-; 2-Octene-1,4-diol; 2-Octene-1,7-diol; 2-Octene-1,7-diol, 2methyl-6-methylene-; 3,5-Octadiene-1,7-diol, 3,7-dimethyl-; 3,5-Octadiene-2,7-diol, 2,7-dimethyl-, 3,5-Octanediol, 4-methylene-, 3,7-Octadiene-1/6-diol, 2.6-dimethyl-3,7-Octadiene-2,5-diol, 2,7-dimethyl-; 3,7-Octadiene-2,6-d/ol, 2,6-dimethyl-; 3-Octene-1,5-diol, 4-methyl-; 3-Octene-1,5-diol, 5-methyl-; 4,6-Octadiene-1,3-diol, 2,2-dimethyl-; 4,7-Octadiene-2,3-diol, 2,6-dimethyl-; 4,7/Octadiene-2,6-diol, 2,6dimethyl-; 4-Octene-1,6-diol, 7-methyl-; 2,7-bis(methylene)-; 2-methylene-; 5,7-Octadiene-1,4-diol, 2,7-dimethyl-; 5,7-Octadiene-1,4-diol, 7-methyl-; 5-Octene-1,3diol; 6-Octene-1,3-diol, 7-methyl-; 6-Octene-1,4-diol, 1-methyl-; 6-Octene-1,5-diol; 6-Octene-1,5-diol, 7-methyl-; 6-Octene-3,5-diol, 2-methyl-; 6-Octene-3,5-diol, 4methyl-; 7-Octene-1,3-diol, 2-methyl-; 7-Octene-1,3-diol, 4-methyl-; 7-Octene-1,3diol, 7-methyl-; 7-Octene-1,5-diol; 7-Octene-1,6-diol; 7-Octene-1,6-diol, 5-methyl-; 7-Octene-2,4-diol, 2-methyl-6-methylene-; 7-Octene-2,5-diol, 7-methyl-; 7-Octene-3,5-diol, 2-methyl-; 1-Nonene-3,5-diol; 1-Nonene-3,7-diol; 3-Nonene-2,5-diol; 4,6-Nonadiene-1,3-diol, 8-methyl-; 4-Nonene-2,8-diol; 6,8-Nonadiene-1,5-diol; 7-Nonene-2,4-diol; 8-Nonene-2,4-diol; 8-Nonene-2,5-diol; 1,9-Decadiene-3,8-diol, 1,9-Decadiene-4,6-diol; and mixtures thereof.

41. The composition of any of Claims 11-15 wherein said principal solvent is selected from the group consisting of:

1,3-Butanediol, 2,2-diallyl-; 1,3-Butanediol, 2-(1-ethyl-1-propenyl)-; 1,3-Butanediol, 2-(2-butenyl)-2-methyl-; 1,3-Butanediol, 2-(3-methyl-2-butenyl)-; 1,3-Butanediol, 2-ethyl-2-(2-propenyl)-; 1,3-Butanediol, 2-methyl-2-(1-methyl-2-propenyl)-, 1,4-Butanediol, 2,3-bis(1-methylethylidene)-; 1,3-Pentanediol, 2-ethenyl-3-ethyl-; 1,3-Pentanediol, 2-ethenyl-4,4-dimethyl-; 1,4-Pentanediol, 3-methyl-2-(2-propenyl)-; 4-Pentene-1,3-diol, 2-(1,1-dimethylethyl)-; 4-Pentene-1,3-diol, 2-ethyl-2,3-dimethyl-; 1,4-Hexanediol, 4-ethyl-2-methylene-; 1,5-Hexadiene-3,4-diol, 2,3,5-trimethyl-; 1,5-Hexanediol, 2-(1-methylethenyl)-; 2-Hexene-1,5-diol, 4-ethenyl-2,5-dimethyl-; 1,4-Heptanediol, 6-methyl-5-methylene-; 2,4-Heptadiene-2,6-diol, 4,6-dimethyl-; 2,6-

Heptadiene-1,4-diol, 2,5,5-trimethyl-; 2-Heptene-1,4-diol, 5,6-dimethyl-; 3-Heptene-1,5-diol, 4,6-dimethyl-; 5-Heptene-1,3-diol, 2,4-dimethyl-; 5-Heptene-1,3-diol, 3,6dimethyl-; 5-Heptene-1.4-diol, 2.6-dimethyl-; 5-Heptene-1.4-diol, 3.6-dimethyl-; 6-Heptene-1.3-diol. 2.2-dimethyl-: 6-Heptene-1.4-diol. 5.6-dimethyl-: 6-Heptene-1.5diol, 2,4-dimethyl-; 6-Heptene-1,5-diol, 2-ethylidene-6-methyl-; 6-Heptene-2,4-diol, 4-(2-propenyl)-; 1-Octene-3,6-diol, 3-ethenyl-; 2,4,6-Octatriene-1/8-diol, 2,7dimethyl-, 2,5-Octadiene-1,7-diol, 2,6-dimethyl-, 2,5-Octadiene-1,7-diol, 3,7dimethyl-; 2,6-Octadiene-1,4-diol, 3,7-dimethyl- (Rosiridol); 2,6-Octadiene-1,8-diol, 2-methyl-; 2,7-Octadiene-1,4-diol, 3,7-dimethyl-; 2,7-Octadiene-1,5-diol, 2,6dimethyl-; 2,7-Octadiene-1,6-diol, 2,6-dimethyl- (8-Hydroxylinalgol); 2,7-Octadiene-1,6-diol, 2,7-dimethyl-; 2-Octene-1,7-diol, 2-methyl-6-methylene-; 3,5-Octadiene-2,7-diol, 2,7-dimethyl-; 3,5-Octanediol, 4-methylene-; 3,7-Octadiene-1,6-diol, 2,6dimethyl-; 4-Octene-1,8-diol, 2-methylene-; 6-Octene-3,5-diol, 2-methyl-; 6-Octene-3,5-diol, 4-methyl-; 7-Octene-2,4-diol, 2-methyl-6-methylene-; 7-Octene-2,5-diol, 7methyl-; 7-Octene-3,5-diol, 2-methyl-; 1-Nonene-3,5-diol; 1-Nonene-3,7-diol; 3-Nonene-2,5-diol; 4-Nonene-2,8-diol; 6,8-Nonadiene-1/5-diol; 7-Nonene-2,4-diol; 8-Nonene-2,4-diol; 8-Nonene-2,5-diol; 1,9-Decadiene-3,8-diol; 1,9-Decadiene-4,6diol; and mixtures thereof.

- 42. The composition of any of Claims 11-15 wherein the softener active comprises up to about 20% of monoester compound in which m is 2 and one YR<sup>1</sup> is -OH, -N(R)H, or -C(O)OH.
- 43. The composition of any of Claims 11-15 wherein at low water levels of from about 5% to about 15%, the softener active-to-principal solvent weight ratio is from about 55:45 to about 85:15; at water levels of from about 15% to about 70%, the softener active-to-principal solvent weight ratio is from about 45:55 to about 70.30, and at high water levels of from about 70% to about 80%, the softener active-to-principal solvent weight ratio is from about 30:70 to about 55:45.
- The composition of Claim 43 wherein at low water levels of from about 5% to about 15%, the softener active-to-principal solvent weight ratio is from about 60:40 to about 80:20; at water levels of from about 15% to about 70%, the softener active-to-principal solvent weight ratio is from about 55:45 to about 70:30; and at high water levels of from about 70% to about 80%, the softener active-to-principal solvent weight ratio is from about 35:65 to about 45:55.

- 45. The composition of Claim 11 which is translucent or clear at 25°C, containing solvents other than principal solvent B., the amount of principal solvent B. being at least about 5% by weight of the composition, where the composition is not translucent or clear at 25°C in the absence of principal solvent B.
- 46. The composition of any of Claims 11-15 which contains one, or more, of the following optional ingredients:
- (a) brightener at a level of from about 0.005% to about 5%
- (b) dispersibility aid at a level of from about 2% to about 25%;
- (c) soil release agent at a level of from 0% to about 10%;
- (d) scum dispersant at a level of from about 2% to about 10%;
- (e) stabilizer selected from the group consisting of antioxidant, reducing agent, chelator, and mixtures thereof, at a level of from 0% to/about 2%;
- (f) bactericide at a level of from about 0.005% to about 5%; and
- (g) chelating agent in addition to any chelator in (e), at a level of from about 0.5% to about 10%.
- 47. A premix of the components of any of Claims 11-15 consisting essentially of: said biodegradable fabric softener active A. said principal solvent B.; and optionally, said water soluble solvent C.
- 48. An article of manufacture comprising the composition of Claim 11 in a clear bottle.
- 49. The article of Claim 48 wherein the bottle has a slight blue tint, sufficient to compensate for any light yellow color of the composition.
- 50. The article of Claim 49 wherein the bottle has an ultraviolet light absorber incorporated in the bottle wall to protect the composition.
- 51. Composition comprising:
- A. from about 2% to about 80% of biodegradable fabric softener active selected from the group consisting of:
  - 1. softener having the formula:

$$\left[ (R)_{4-m} - N^{(+)} - [(CH_2)_n - Y - R^{-1}]_m \right] x^{(-)}$$
(1)

wherein each R substituent is H, or a short chain  $C_1$ - $C_6$  alkyl or hydroxyalkyl group, benzyl, or mixtures thereof; each m is 2 or 3; each n is from 1 to about 4; each Y is -O-(O)C-, -(R)N-(O)C-, -C(O)-N(R)-, or -C(O)-O-, the sum of carbons in each  $R^1$  or  $YR^1$  plus one when Y is -O-(O)C- or -(R)N-(O)C-, being  $C_6$ - $C_{22}$ , but when one  $R^1$  or  $YR^1$  sum is less than about 12, then the other  $R^1$  or  $YR^1$  sum is at least about 16, with each  $R^1$  being a long chain hydrocarbyl, or substituted hydrocarbyl substituent, and for  $R^1$  or  $YR^1$  comprising a  $C_{15}$ - $C_{21}$  straight chain alkyl or alkylene group, the Iodine Value of a fatty acid which contains this  $R^1$  group being from about 20 to about 140, and wherein the counterion,  $X^*$ , can be any softener-compatible anion;

2. softener having the formula:

wherein each Y, R, R<sup>1</sup>, and X<sup>(-)</sup> have the same meanings as before; and

- 3. mixtures thereof;
- B. less than about 40% by weight of the composition of principal alcohol solvent selected from the group consisting of:
- I. mono-ols including:
  - a. n-propanol; and/or
  - b. 2-butanol and/or 2/methyl-2-propanol;
- II. hexane diol isomers including: 2,3-butanediol, 2,3-dimethyl-; 1,2-butanediol, 2,3-dimethyl-; 1,2-butanediol, 3,3-dimethyl-; 2,3-pentanediol, 2-methyl-; 2,3-pentanediol, 3-methyl-; 2,3-pentanediol, 3-methyl-; 2,3-hexanediol; 3,4-hexanediol; 1,2-butanediol, 2-ethyl-; 1,2-pentanediol, 2-methyl-; 1,2-pentanediol, 3-methyl-; 1,2-pentanediol, 4-methyl-; and/or 1,2-hexanediol;
- III. heptane diol isomers including: 1,3-propanediol, 2-butyl-; 1,3-propanediol, 2,2-diethyl-; 1,3-propanediol, 2-(1-methylpropyl)-; 1,3-propanediol, 2-(2-methylpropyl)-; 1,3-propanediol, 2-methyl-2-propyl-; 1,2-butanediol, 2,3,3-trimethyl-; 1,4-butanediol, 2-ethyl-2-methyl-; 1,4-butanediol, 2-ethyl-3-methyl-; 1,4-butanediol, 2-propyl-; 1,4-butanediol, 2-isopropyl-; 1,5-pentanediol, 2,2-dimethyl-; 1,5-

pentanediol, 2,3-dimethyl-; 1,5-pentanediol, 2,4-dimethyl-; 1,5-pentanediol, 3,3dimethyl-; 2,3-pentanediol, 2,3-dimethyl-; 2,3-pentanediol, 2,4-dimethyl-; 2,3pentanediol, 3,4-dimethyl-, 2,3-pentanediol, 4,4-dimethyl-, 3,4-pentanediol, 2,3dimethyl-; 1,5-pentanediol, 2-ethyl-; 1,6-hexanediol, 2-methyl-; 1,6-hexanediol, 3methyl-, 2,3-hexanediol, 2-methyl-; 2,3-hexanediol, 3-methyl-; /2,3-hexanediol, 4methyl-; 2,3-hexanediol, 5-methyl-; 3,4-hexanediol, 2-methyl-; 3,4-hexanediol, 3methyl-; 1,3-heptanediol; 1,4-heptanediol; 1,5-heptanediol; and/or 1,6-heptanediol; octane diol isomers including: 1,3-propanediol, /2-(2-methylbutyl)-; 1,3-IV. propanediol, 2-(1,1-dimethylpropyl)- 1,3-propanediol, 2-(1,2-dimethylpropyl)-; 1,3-2-(1-ethylpropyl)-: 1,3-propanediol, 2-(1-methylbutyl)-; propanediol. 1,3propanediol, 2-(2,2-dimethylpropyl)-; 1,3-propanediol, 2-(3-methylbutyl)-; 1,3propanediol. 2-butyl-2-methyl-; 1.3-propanediol, 2-ethyl-2-isopropyl-; 1.3propanediol, 2-ethyl-2-propyl-; 1,3-propanediol, 2-methyl-2-(1-methylpropyl)-; 1,3-2-methyl-2-(2-methylpropyl)-; 1.3-propanediol, 2-tertiary-butyl-2methyl-; 1,3-butanediol, 2,2-diethyl-; 1,3-butanediol, 2-(1-methylpropyl)-; 1,3butanediol, 2-butyl-; 1,3-butanediol, 2-ethyl-2,3-dimethyl-; 1,3-butanediol, 2-(1,1dimethylethyl)-; 1,3-butanediol, 2-(2-methylpropyl)-; 1,3-butanediol, 2-methyl-2isopropyl-; 1,3-butanediol, 2-methyl-2-propyl-; 1,3-butanediol, 3-methyl-2-isopropyl-: 1.3-butanediol, 3-methyl-2-propyl-; 1,4-butanediol, 2,2-diethyl-, 1,4-butanediol, 2methyl-2-propyl-; 1,4-butanediol, 2/(1-methylpropyl)-; 1,4-butanediol, 2-ethyl-2,3-2/ethyl-3,3-dimethyl-; 1,4-butanediol. 2-(1,1dimethyl-: 1.4-butanediol, dimethylethyl)-; 1,4-butanediol/2-(2-methylpropyl)-; 1,4-butanediol, 2-methyl-3propyl-, 1,4-butanediol, 3-methyl-2-isopropyl-, 1,3-pentanediol, 2,2,3-trimethyl-, 1,3-pentanediol, 2,2,4-trimerhyl-; 1,3-pentanediol, 2,3,4-trimethyl-; 1,3-pentanediol, 2,4,4-trimethyl-, 1,3-pentanediol, 3,4,4-trimethyl-, 1,4-pentanediol, 2,2,3-trimethyl-, 1,4-pentanediol, 2,2,4-trimethyl-; 1,4-pentanediol, 2,3,3-trimethyl-; 1,4-pentanediol, 2,3,4-trimethyl-; 1,4-pentanediol, 3,3,4-trimethyl-; 1,5-pentanediol, 2,2,3-trimethyl-, 1.5-pentanediol, 2.2/4-trimethyl-; 1.5-pentanediol, 2,3,3-trimethyl-; 1,5-pentanediol, 2.3.4-trimethyl-, 2.4-pentanediol, 2.3.3-trimethyl-, 2.4-pentanediol, 2.3.4-trimethyl-, 1,3-pentanediol/ 2-ethyl-2-methyl-; 1,3-pentanediol, 2-ethyl-3-methyl-, 1,3pentanediol, 2-ethyl-4-methyl-; 1,3-pentanediol, 3-ethyl-2-methyl-; 1,4-pentanediol, 2-ethyl-2-methyl-; 1,4-pentanediol, 2-ethyl-3-methyl-; 1,4-pentanediol, 2-ethyl-4methyl-;/1,4-pentanediol, 3-ethyl-2-methyl-; 1,4-pentanediol, 3-ethyl-3-methyl-; 1,5pentanediol, 2-ethyl-2-methyl-; 1,5-pentanediol, 2-ethyl-3-methyl-; 1,5-pentanediol, 2-ethyl-4-methyl-; 1,5-pentanediol, 3-ethyl-3-methyl-; 2,4-pentanediol, 3-ethyl-2methyl-; 1,3-pentanediol, 2-isopropyl-; 1,3-pentanediol, 2-propyl-; 1,4-pentanediol, 2-isopropyl-; 1,4-pentanediol, 2-propyl-; 1,4-pentanediol, 3-isopropyl-; 1,5pentanediol, 2-isopropyl-, 2,4-pentanediol, 3-propyl-, 1,3-hexanediol, 2,2-dimethyl-, 1,3-hexanediol, 2,3-dimethyl-; 1,3-hexanediol, 2,4-dimethyl-; 1,3-hexanediol, 2,5dimethyl-; 1,3-hexanediol, 3,4-dimethyl-; 1,3-hexanediol, 3.5-dimethyl-: hexanediol, 4,5-dimethyl-; 1,4-hexanediol. 2,2-dimethyl-; 1,4-hexanediol, 2,3dimethyl-; 1,4-hexanediol, 2,4-dimethyl-; 1,4-hexanediol, 2,5-dimethyl-; 1,4hexanediol, 3,3-dimethyl-; 1,4-hexanediol, 1/4-hexanediol, 3,4-dimethyl-; 3,5dimethyl-; 1,3-hexanediol, 4,4-dimethyl-; 1,4-hexanediol, 4,5-dimethyl-; 1,4hexanediol, 5,5-dimethyl-; 1,5-hexanediol, 2,2-dimethyl-;/ 1,5-hexanediol, 2,3dimethyl-; 1,5-hexanediol, 2,4-dimethyl-; 1.5-hexanedial. 2.5-dimethyl-; 1.5hexanediol, 3,3-dimethyl-; 1,5-hexanediol, 1.5-hexanediol. 3.4-dimethyl-: 3,5dimethyl-: 1.5-hexanediol. 4,5-dimethyl-; 1,6-hexanediol, 2.2-dimethyl-: 1.6hexanediol, 2,3-dimethyl-; 1,6-hexanediol, 2.4-dimethyl-; 1.6-hexanediol, 2,5dimethyl-; 1.6-hexanediol, 3.3-dimethyl-: 1,6-hexanediol, 3,4-dimethyl-; 2,4-2,4-dimethyl-; 2,4-hexanediol, 2,5hexanediol, 2,3-dimethyl-; 2,4-hexanediol, dimethyl-; 2,4-hexanediol, 3,3-dimethyl-; 2,4/hexanediol, 3,4-dimethyl-; 2,4-4,5-dimethyl-: hexanediol, 3,5-dimethyl-; 2,4-hexanediol, 2,4-hexanediol, 5,5dimethyl-; 2,5-hexanediol, 2,3-dimethyl-; 2.5-hexanediol 2,4-dimethyl-; 2.5hexanediol, 2,5-dimethyl-; 2,5-hexanediol, 3,3-dimethyl-; 2,5-hexanediol, 3,4dimethyl-; 2,6-hexanediol, 3,3-dimethyl-; 1,3-hexanediol, 2-ethyl-; 1,3-hexanediol, 4ethyl-; 1,4-hexanediol, 2-ethyl-; 1,4-hexanediol, 4-ethyl-; 1,5-hexanediol, 2-ethyl-; 2,4-hexanediol, 3-ethyl-, 2,4-hexanediol, 4-ethyl-, 2,5-hexanediol, 3-ethyl-, 1,3heptanediol, 2-methyl-; 1,3-heptanediol/, 3-methyl-; 1,3-heptanediol, 4-methyl-; 1,3heptanediol, 5-methyl-; 1,3-heptanediol, 6-methyl-; 1,4-heptanediol, 2-methyl-; 1,4heptanediol, 3-methyl-; 1,4-heptanediol, 4-methyl-; 1,4-heptanediol, 5-methyl-; 1,4heptanediol, 6-methyl-; 1,5-heptanediol, 2-methyl; 1,5-heptanediol, 3-methyl-; 1,5heptanediol, 4-methyl-; 1,5-heptanediol, 5-methyl-; 1,5-heptanediol, 6-methyl-; 1,6heptanediol, 2-methyl-; 1,6-heptanediol, 3-methyl-; 1,6-heptanediol, 4-methyl-; 1,6heptanediol, 5-methyl-; 1,6-heptanediol, 6-methyl-; 2,4-heptanediol, 2-methyl-; 2,4heptanediol, 3-methyl-; 2,4-heptanediol, 4-methyl-; 2,4-heptanediol, 5-methyl-; 2,4heptanediol, 6-methyl-, 2,5-heptanediol, 2-methyl-, 2,5-heptanediol, 3-methyl-, 2,5heptanediol, 4-methyl-; 2,5-heptanediol, 5-methyl-; 2,5-heptanediol, 6-methyl-; 2,6heptanediol, 2-methyl-; 2,6-heptanediol, 3-methyl-; 2,6-heptanediol, 4-methyl-; 3,4heptanediol, 3-methyl-; 3,5-heptanediol, 2-methyl-; 3,5-heptanediol, 3-methyl-; 3,5heptanediol, 4-methyl-; / 2,4-octanediol; 2,5-octanediol; 2,6-octanediol; 2,7octanediol: 3.5-octanediol: and/or 3.6-octanediol:

V. nonane diol isomers including: 2,4-pentanediol, 2,3,3,4-tetramethyl-; 2,4-pentanediol, 3-tertiarybutyl-; 2,4-hexanediol, 2,5,5-trimethyl-; 2,4-hexanediol, 3,3,4-

trimethyl-; 2,4-hexanediol, 3,3,5-trimethyl-; 2,4-hexanediol, 3,5,5-trimethyl-; hexanediol, 4,5,5-trimethyl-; 2,5-hexanediol, 3,3,4-trimethyl-; and/or 2,5-hexanediol, 3,3,5-trimethyl-;

VI. glyceryl ethers and/or di(hydroxyalkyl)ethers including: 1,2-propanediol, 3-(n-pentyloxy)-; 1,2-propanediol, 3-(2-pentyloxy)-; 1,2-propanediol, 3-(5-pentyloxy)-; 1,2-propanediol, 3-(2-methyl-1-butyloxy)-; 1,2-propanediol, 3-(iso-ámyloxy)-; 1,2propanediol, 3-(3-methyl-2-butyloxy)-; 1,2-propanediol, 3-(cyclophexyloxy)-; 1,2propanediol, 3-(1-cyclohex-1-enyloxy)-; 1,3-propanediol, 2-(pentyloxy)-; 1,3propanediol, 2-(2-pentyloxy)-; 1,3-propanediol, 2-(3-pentyloxy)-/ 1,3-propanediol, 2-(2-methyl-1-butyloxy)-; 1,3-propanediol, 2-(iso-amyloxy)-; 1/3-propanediol, 2-(3methyl-2-butyloxy)-; 1,3-propanediol, 2-(cyclohexyloxy)-; 1,3-propanediol, 2-(1cyclohex-1-enyloxy)-; 1.2-propanediol. 3-(butyloxy)-, triethoxylated; propanediol. 3-(butyloxy)-, tetraethoxylated; 1.2-propanediol. 3-(butyloxy)-, pentaethoxylated; 1,2-propanediol, 3-(butyloxy)-, hexaethoxylated; 1,2-propanediol, 3-(butyloxy)-, heptaethoxylated; 1,2-propanediol, 3-(butyloxy)-, octaethoxylated; 1,2-propanediol, 3-(butyloxy)-, nonaethoxylated; 1/2-propanediol, 3-(butyloxy)-, monopropoxylated; 1,2-propanediol, 3-(butyloxy)-, dibutyleneoxylated; 1,2propanediol, 3-(butyloxy)-, tributyleneoxylated; 1/2-propanediol, 3-phenyloxy-; 1,2propanediol, 3-benzyloxy-; 1,2-propanediol, 3-(2-phenylethyloxy)-; 1,2-propanediol, 3-(1-phenyl-2-propanyloxy)-; 1,3-propanediol/2-phenyloxy-; 1,3-propanediol, 2-(mcresyloxy)-; 1,3-propanediol, 2-(p-cresyloxy)-; 1,3-propanediol, -benzyloxy-; 1,3propanediol, 2-(2-phenylethyloxy)-; 1,3-propanediol, 2-(1-phenylethyloxy)-; bis(2hydroxybutyl)ether; and/or bis(2-hydroxycyclopentyl)ether

saturated and unsaturated alicyclic diols and their derivatives including: VII.

the saturated diols and their derivatives, including: (a)

1-isopropyl-1,2-cyclobutanediol;/3-ethyl-4-methyl-1,2-cyclobutanediol; 3-propyl-1,2cyclobutanediol; 3-isopropyl-1,2-cyclobutanediol; 1-ethyl-1,2-cyclopentanediol; 1,2dimethyl-1,2-cyclopentanediol; 1,4-dimethyl-1,2-cyclopentanediol; 2,4,5-trimethyl-1,3-cyclopentanediol; 3,3-dimethyl-1,2-cyclopentanediol; 3,4-dimethyl-1,2cyclopentanediol; 3,5-dimethyl-1,2-cyclopentanediol; 3-ethyl-1,2-cyclopentanediol; 4,4-dimethyl-1,2-cyclopentanediol; 4-ethyl-1,2-cyclopentanediol; bis(hydroxymethyl)cyclohexane; 1,2-bis(hydroxymethyl)cyclohexane; 1,2-dimethyl-1,3-cyclohexanediol; 1,3-bis(hydroxymethyl)cyclohexane; 1,3-dimethyl-1,3cyclohexanediol; 1,6-dimethyl-1,3-cyclohexanediol; 1-hydroxy-cyclohexaneethanol; 1-methyl-1,2-1-hydroxy-cyclohexanemethanol; 1-ethyl-1,3-cyclohexanediol; 2,3-dimethyl-1,4cyclohexanediol: 2,2-dimethyl-1,3-cyclohexanediol;

cyclohexanediol;

2,4-dimethyl-1,3-cyclohexanediol;

2,5-dimethyl-1,3-

cyclohexanediol; 2,6-dimethyl-1,4-cyclohexanediol; 2-ethyl-1,3-cyclohexanediol; /2hydroxycyclohexaneethanol; 2-hydroxyethyl-1-cyclohexanol; 3-hydroxyethyl-1cyclohexanol; 3-hydroxycyclohexaneethanol; 3-hydroxymethylcyclohexanol; 4,4-dimethyl-1,3-cyclohexanediol; 4.5-dimethyl-1,3methyl-1,2-cyclohexanediol; cyclohexanediol; 4,6-dimethyl-1,3-cyclohexanediol; 4-ethyl-1,3-cyclohexanediol; 4hydroxyethyl-1-cyclohexanol; 4-methyl-1,2-cyclohexanediol; 5.5-dimethyl-1,3cyclohexanediol; 5-ethyl-1,3-cyclohexanediol; 1,2-cycloheptanediol/ 2-methyl-1,3cycloheptanediol; 2-methyl-1,4-cycloheptanediol; 4-methyl-1,3-cycloheptanediol; 5methyl-1,3-cycloheptanediol; 5-methyl-1,4-cycloheptanediol:/ 6-methyl-1,4cycloheptanediol; ; 1,3-cyclooctanediol; 1,4-cyclooctanediol; /1,5-cyclooctanediol; 1,2-cyclohexanediol, diethoxylate; 1,2-cyclohexanediol, triethoxylate; 1,2cyclohexanediol. tetraethoxylate: 1.2-cyclohexanediol. pentaethoxylate; 1.2cyclohexanediol, hexaethoxylate; 1.2-cyclohexanediol./ heptaethoxylate; 1.2cyclohexanediol. octaethoxylate; 1.2-cyclohexanediol. nonaethoxylate; 1,2cyclohexanediol, monopropoxylate; 1,2-cyclohexanediol, monobutylenoxylate; 1,2cyclohexanediol, dibutylenoxylate; and/or 1,2-cyclohexanediol, tributylenoxylate; and (b) the unsaturated alicyclic diols including: 1,2-cyclobutanediol, 1-ethenyl-2-ethyl-; 3-cyclobutene-1,2-diol, 1,2,3,4-tetramethyl-; 3-cyclobutene-1,2-diol, 3,4-diethyl-; 3cyclobutene-1,2-diol, 3-(1,1-dimethylethyl)-; 3-cyclobutene-1,2-diol, 3-butyl-; 1,2cyclopentanediol, 1,2-dimethyl-4-methylene-/ 1,2-cyclopentanediol, methylene-, 1,2-cyclopentanediol, 4-(1-propenyl); 3-cyclopentene-1,2-diol, 1-ethyl-3-1,2-cyclohexanediol, 1-ethenyl-; 1,2-cyclohexanediol, methylene-; 1,2-cyclohexanediol, 1-methyl-4-methylene-; 1,2-cyclohexanediol, 3ethenyl-; 1,2-cyclohexanediol, 4-ethenyl-; 3-cyclohexene-1,2-diol, 2,6-dimethyl-; 3cyclohexene-1,2-diol, 6,6-dimethyl-, 4-cyclohexene-1,2-diol, 3,6-dimethyl-, 4cyclohexene-1,2-diol, 4,5-dimethyl-; 3-cyclooctene-1,2-diol; 4-cyclooctene-1,2-diol, and/or 5-cyclooctene-1,2-diol;

## VIII. Alkoxylated derivatives of C<sub>3-8</sub> diols including:

1. 1,2-propanediol (C3) 2(Me-E<sub>1-4</sub>); 1,2-propanediol (C3) PO<sub>4</sub>; 1,2-propanediol, 2-methyl- (C4) (Me-E<sub>4-10</sub>), 1,2-propanediol, 2-methyl- (C4) 2(Me-E<sub>1</sub>); 1,2-propanediol, 2-methyl- (C4) PO<sub>3</sub>; 1,2-propanediol, 2-methyl- (C4) BO<sub>1</sub>; 1,3-propanediol (C3) 2(Me-E<sub>6-8</sub>); 1,3-propanediol (C3) PO<sub>5-6</sub>; 1,3-propanediol, 2,2-diethyl- (C7) E<sub>1-7</sub>; 1,3-propanediol, 2,2-diethyl- (C7) PO<sub>1</sub>; 1,3-propanediol, 2,2-dimethyl- (C5) 2(Me E<sub>1-2</sub>); 1,3-propanediol, 2,2-dimethyl- (C5) PO<sub>3-4</sub>; 1,3-propanediol, 2-(1-methylpropyl)- (C7) E<sub>1-7</sub>; 1,3-propanediol, 2-(1-methylpropyl)- (C7) PO<sub>1</sub>; 1,3-propanediol, 2-(1-methylpropyl)- (C7)

propanediol, 2-(2-methylpropyl)- (C7) PO1; 1,3-propanediol, 2-(2-methylpropyl)- (C7) n-BO1-2; 1,3-propanediol, 2-ethyl- (C5) (Me  $E_{6-10}$ ); 1,3-propanediol, 2-ethyl- (C5) 2(Me  $E_1$ ); 1,3-propanediol, 2-ethyl- (C5) PO3; 1,3-propanediol, 2-ethyl-2-methyl- (C6) (Me  $E_{1-6}$ ); 1,3-propanediol, 2-ethyl-2-methyl- (C6) PO2; 1,3-propanediol, 2-ethyl-2-methyl- (C6) (Me  $E_{1-6}$ ); 1,3-propanediol, 2-isopropyl- (C6) PO2; 1,3-propanediol, 2-isopropyl- (C6) BO1; 1,3-propanediol, 2-methyl- (C4) 2(Me  $E_{2-5}$ ); 1,3-propanediol, 2-methyl- (C4) PO4-5; 1,3-propanediol, 2-methyl- (C4) BO2; 1,3-propanediol, 2-methyl-2-isopropyl- (C7)  $E_{2-9}$ ; 1,3-propanediol, 2-methyl-2-isopropyl- (C7) PO1; 1,3-propanediol, 2-methyl-2-isopropyl- (C7)  $E_{1-7}$ ; 1,3-propanediol, 2-methyl-2-propyl- (C7) PO1; 1,3-propanediol, 2-methyl-2-propyl- (C7)  $E_{1-7}$ ; 1,3-propanediol, 2-methyl-2-propyl- (C6) RO1; 1,3-propanediol, 2-propyl- (C6) RO2; 1,3-propanediol, 2-propyl- (C6) RO3; 1,3-propane

1,2-butanediol (C4) (Me E<sub>2-8</sub>); 1,2-butanediol (C4) PO<sub>2-3</sub>; 1,2butanediol (C4) BO<sub>1</sub>; 1,2-butanediol, 2,3-dimethyl- (C6) E<sub>1-6</sub>; 1,2-butanediol, 2,3dimethyl- (C6) n-BO<sub>1-2</sub>; 1,2-butanediol, 2-ethyl- (C6)  $\not$ E<sub>1-3</sub>; 1,2-butanediol, 2-ethyl-(C6) n-BO<sub>1</sub>, 1,2-butanediol, 2-methyl- (C5) (Me  $E_{1-2}$ ); 1,2-butanediol, 2-methyl-(C5) PO<sub>1</sub>; 1,2-butanediol, 3,3-dimethyl- (C6)  $E_{V-6}$ ; 1,2-butanediol, 3,3-dimethyl-(C6) n-BO<sub>1-2</sub>; 1,2-butanediol, 3-methyl- (C5) (Me E<sub>1-2</sub>); 1,2-butanediol, 3-methyl-(C5) PO<sub>1</sub>; 1,3-butanediol (C4) 2(Me E<sub>3-6</sub>); 1,3-butanediol (C4) PO<sub>5</sub>; 1,3-butanediol (C4) BO<sub>2</sub>; 1,3-butanediol, 2,2,3-trimethyl-(C7) (Me E<sub>1-3</sub>); 1,3-butanediol, 2,2,3trimethyl- (C7) PO<sub>1-2</sub>; 1,3-butanediol/ 2,2-dimethyl- (C6) (Me E<sub>3-8</sub>); 1,3butanediol, 2,2-dimethyl- (C6) PO3; 1,3-butanediol, 2,3-dimethyl- (C6) (Me E3-8); 1,3-butanediol, 2,3-dimethyl- (C6) PO3; 1,3-butanediol, 2-ethyl- (C6) (Me E<sub>1-6</sub>); 1,3-butanediol, 2-ethyl- (C6)  $\cancel{PO}_{2-3}$ ; 1,3-butanediol, 2-ethyl- (C6)  $\cancel{BO}_1$ ; 1,3butanediol, 2-ethyl-2-methyl- (C7) (Me E1); 1,3-butanediol, 2-ethyl-2-methyl- (C7) PO<sub>1</sub>; 1,3-butanediol, 2-ethyl-2-methyl- (C7) n-BO<sub>2-4</sub>; 1,3-butanediol, 2-ethyl-3methyl- (C7) (Me E<sub>1</sub>); 1,3-butanediol, 2-ethyl-3-methyl- (C7) PO<sub>1</sub>; 1,3-butanediol, 2-ethyl-3-methyl- ( $\mathbb{C}^{7}$ ) n-BO<sub>2-4</sub>; 1,3-butanediol, 2-isopropyl- ( $\mathbb{C}^{7}$ ) (Me E<sub>1</sub>), 1,3butanediol, 2-isopropyl- (C7) PO<sub>1</sub>; 1,3-butanediol, 2-isopropyl- (C7) n-BO<sub>2-4</sub>; 1,3butanediol, 2-methyl- (C5) 2(Me E<sub>1-3</sub>); 1,3-butanediol, 2-methyl- (C5) PO<sub>4</sub>; 1,3butanediol, 2-propyl- (C7) E<sub>2-9</sub>; 1,3-butanediol, 2-propyl- (C7) PO<sub>1</sub>; 1,3-butanediol, 2-propyl- (C7) n-BO<sub>1-3</sub>; 1,3-butanediol, 3-methyl- (C5) 2(Me E<sub>1-3</sub>); 1,3-butanediol, 3-methyl- (C5) PO<sub>4</sub>, 1,4-butanediol (C4) 2(Me E<sub>2-4</sub>); 1,4-butanediol (C4) PO<sub>4-5</sub>; 1,4-butanediol (C4) BO2; 1,4-butanediol, 2,2,3-trimethyl- (C7) E2-9; 1,4-butanediol, 2,2,3-trimethyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 2,2,3-trimethyl- (C7) n-BO<sub>1-3</sub>; 1,4butanediol, 2,2-dimethyl- (C6) (Me E<sub>1-6</sub>); 1,4-butanediol, 2,2-dimethyl- (C6) PO<sub>2</sub>; 1,4-butanediol, 2,2-dimethyl- (C6) BO<sub>1</sub>; 1,4-butanediol, 2,3-dimethyl- (C6) (Me E<sub>V</sub> 6); 1,4-butanediol, 2,3-dimethyl- (C6) PO<sub>2</sub>; 1,4-butanediol, 2,3-dimethyl- (C6) BØ<sub>1</sub>; 1,4-butanediol, 2-ethyl- (C6) (Me E<sub>1-4</sub>); 1,4-butanediol, 2-ethyl- (C6) PO<sub>2</sub>, 1,4butanediol, 2-ethyl- (C6) BO<sub>1</sub>; 1,4-butanediol, 2-ethyl-2-methyl- (C7) E<sub>1</sub>/<sub>7</sub>; 1,4butanediol, 2-ethyl-2-methyl- (C7) PO1; 1,4-butanediol, 2-ethyl-2-methyl- (C7) n-BO<sub>1-2</sub>; 1,4-butanediol, 2-ethyl-3-methyl- (C7)  $E_{1-7}$ ; 1,4-butanediol/ 2-ethyl-3methyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 2-ethyl-3-methyl- (C7) n-BO<sub>1-2</sub>; 1,4-butanediol, 2-isopropyl- (C7) E<sub>1-7</sub>; 1,4-butanediol, 2-isopropyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 2isopropyl- (C7) n-BO<sub>1-2</sub>; 1,4-butanediol, 2-methyl- (C5) (Me  $E_{6-10}$ ); 1,4butanediol, 2-methyl- (C5) 2(Me E1); 1,4-butanediol, 2-methyl- (C5) PO3; 1,4butanediol, 2-methyl- (C5) BO<sub>1</sub>; 1,4-butanediol, 2-propyl- (C7) E<sub>1-5</sub>; 1,4butanediol, 2-propyl- (C7) n-BO<sub>1-2</sub>; 1,4-butanediol, 3-ethyl-1-methyl- (C7) E<sub>2-9</sub>; 1,4-butanediol, 3-ethyl-1-methyl- (C7) PO<sub>1</sub>; 1,4-butanediol, 3-ethyl-1-methyl- (C7) n-BO<sub>1-3</sub>; 2,3-butanediol (C4) (Me E<sub>6-10</sub>); 2,3-butanediol (C4) 2(Me E<sub>1</sub>); 2,3butanediol (C4) PO<sub>3-4</sub>; 2,3-butanediol (C4) BO<sub>1</sub>; 2,3-butanediol, 2,3-dimethyl- (C6) E<sub>3-9</sub>; 2,3-butanediol, 2,3-dimethyl- (C6) PO<sub>1</sub>; 2,3-butanediol, 2,3-dimethyl- (C6) n-BO<sub>1-3</sub>; 2,3-butanediol, 2-methyl- (C5) (Me  $E_{1-5}$ ); 2,3-butanediol, 2-methyl- (C5) PO<sub>2</sub>; 2,3-butanediol, 2-methyl- (C5) BO<sub>1</sub>;

1,2-pentanediol (C5)  $E_{3-10}$ ; /1,2-pentanediol, (C5) PO<sub>1</sub>; 1,2pentanediol, (C5) n-BO<sub>2-3</sub>; 1,2-pentanediol, 2-methyl (C6) E<sub>1-3</sub>; 1,2-pentanediol, 2methyl (C6) n-BO<sub>1</sub>; 1,2-pentanediol, 2-methyl (C6) BO<sub>1</sub>; 1,2-pentanediol, 3-methyl (C6) E<sub>1-3</sub>; 1,2-pentanediol, 3-methyl (C6) n-BO<sub>1</sub>; 1,2-pentanediol, 4-methyl (C6) E<sub>1-3</sub>; 1,2-pentanediol, 4-methyl (C6) n-BO<sub>1</sub>; 1,3-pentanediol (C5) 2(Me-E<sub>1-2</sub>); 1,3pentanediol (C5) PO<sub>3-4</sub>; 1,3-pentanediol, 2,2-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3pentanediol, 2,2-dimethyl- (C7) PO $\sqrt{1,3}$ -pentanediol, 2,2-dimethyl- (C7) n-BO<sub>2-4</sub>, 1.3-pentanediol, 2,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>, 1,3-pentanediol, 2,3-dimethyl- (C7) n-BO<sub>2-4</sub>, 1,3-pentanediol, 2,4-dimethyl-(C7) (Me-E<sub>1</sub>); 1,3-pentanediol/2,4-dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 2,4dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3-pentanediol, 2-ethyl- (C7) E<sub>2-9</sub>; 1,3-pentanediol, 2ethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 2-ethyl- (C7) n-BO<sub>1-3</sub>; 1,3-pentanediol, 2-methyl-(C6) 2(Me-E<sub>1-6</sub>); 1,3-pentanediol, 2-methyl- (C6) PO<sub>2-3</sub>; 1,3-pentanediol, 2methyl- (C6) BO<sub>1</sub>; 1,3-pentanediol, 3,4-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3-pentanediol, 3,4-dimethyl- (C7) PO<sub>1</sub>, 1,3-pentanediol, 3,4-dimethyl- (C7) n-BO<sub>2-4</sub>, 1,3pentanediol, 3-methyl- (C6) (Me-E<sub>1-6</sub>); 1,3-pentanediol, 3-methyl- (C6) PO<sub>2-3</sub>; 1,3pentanediol, 3-methyl- (C6) BO<sub>1</sub>; 1,3-pentanediol, 4,4-dimethyl- (C7) (Me-E<sub>1</sub>); 1,3pentanediol, 4,4-dimethyl- (C7) PO<sub>1</sub>; 1,3-pentanediol, 4,4-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,3-pentanediol, 4-methyl- (C6) (Me-E<sub>1-6</sub>), 1,3-pentanediol, 4-methyl- (C6) PO<sub>2-3</sub>,

1,3-pentanediol, 4-methyl- (C6) BO<sub>1</sub>; 1,4-pentanediol, (C5) 2(Me-E<sub>1-2</sub>)/, 1,4pentanediol (C5) PO<sub>3-4</sub>; 1,4-pentanediol, 2,2-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4pentanediol, 2,2-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 2,2-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 2,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 2,3-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 2,4-dimethyl-(C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 2,4-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 2,4dimethyl- (C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 2-methyl- (C6)/(Me- $E_{1-6}$ ); 1,4pentanediol, 2-methyl- (C6) PO<sub>2-3</sub>; 1,4-pentanediol, 2-methyl- (C6) BO<sub>1</sub>; 1,4pentanediol, 3,3-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 3,3-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 3,3-dimethyl- (C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 3,4-dimethyl- (C7) (Me-E<sub>1</sub>); 1,4-pentanediol, 3,4-dimethyl- (C7) PO<sub>1</sub>; 1,4-pentanediol, 3,4-dimethyl-(C7) n-BO<sub>2-4</sub>; 1,4-pentanediol, 3-methyl- (C6) 2(Me-E<sub>1-6</sub>); 1,4-pentanediol, 3methyl- (C6) PO<sub>2-3</sub>; 1,4-pentanediol, 3-methyl- (C6) BO<sub>1</sub>; 1,4-pentanediol, 4methyl- (C6) 2(Me-E<sub>1-6</sub>); 1,4-pentanediol, 4-methyl- (C6) PO<sub>2-3</sub>; 1,4-pentanediol, 4-methyl- (C6) BO<sub>1</sub>; 1,5-pentanediol, (C5) (Me-E<sub>4-10</sub>); 1,5-pentanediol (C5) 2(Me-E<sub>1</sub>); 1,5-pentanediol (C5) PO<sub>3</sub>; 1,5-pentanediol, 2,2-dimethyl- (C7) E<sub>1-7</sub>; 1,5pentanediol, 2,2-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 2,2-dimethyl- (C7) n-BO<sub>1-2</sub>; 1,5-pentanediol, 2,3-dimethyl- (C7) E<sub>1-7</sub>, 1,5-pentanediol, 2,3-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 2,3-dimethyl- (C7) n-BO<sub>1-2</sub>; 1,5-pentanediol, 2,4-dimethyl- (C7)  $E_{1-7}$ ; 1,5-pentanediol, 2,4-dimethyl-/(C7) PO<sub>1</sub>; 1,5-pentanediol, 2,4-dimethyl- (C7) n-BO<sub>1-2</sub>; 1,5-pentanediol, 2-ethyl-(C7) E<sub>1-5</sub>; 1,5-pentanediol, 2-ethyl- (C7) n-BO<sub>1</sub>. 2; 1,5-pentanediol, 2-methyl- (C6) (Me-E<sub>1-4</sub>); 1,5-pentanediol, 2-methyl- (C6) PO<sub>2</sub>; 1,5-pentanediol, 3,3-dimethyl-(C7) E<sub>1-7</sub>; 1,5-pentanediol, 3,3-dimethyl- (C7) PO<sub>1</sub>; 1,5-pentanediol, 3,3-dimethyl- (C7) n-BO<sub>1-2</sub>; 1,5-pentanediol, 3-methyl- (C6) (Me-E<sub>1-4</sub>); 1,5-pentanediol, 3-methyl- (C6) PO<sub>2</sub>; 2,3-pentanediol, (C5) (Me-E<sub>1-3</sub>); 2,3pentanediol, (C5) PO<sub>2</sub>, 2,3-pentanediol, 2-methyl- (C6) E<sub>1-7</sub>; 2,3-pentanediol, 2methyl- (C6) PO<sub>1</sub>; 2,3-pentanediol, 2-methyl- (C6) n-BO<sub>1-2</sub>; 2,3-pentanediol, 3methyl- (C6) E<sub>1-7;</sub>/2,3-pentanediol, 3-methyl- (C6) PO<sub>1</sub>; 2,3-pentanediol, 3-methyl-(C6) n-BO<sub>1-2</sub>; 2,3-pentanediol, 4-methyl- (C6) E<sub>1-7</sub>; 2,3-pentanediol, 4-methyl-(C6) PO<sub>1</sub>; 2,3-pentanediol, 4-methyl- (C6) n-BO<sub>1-2</sub>; 2,4-pentanediol, (C5) 2(Me-E<sub>1-4</sub>); 2,4-pentanediol (C5) PO<sub>4</sub>; 2,4-pentanediol, 2,3-dimethyl- (C7) (Me-E<sub>1-4</sub>); 2,4-pentanediol, 2,3-dimethyl- (C7) PO2; 2,4-pentanediol, 2,4-dimethyl- (C7) (Me-E<sub>1-4</sub>); /2,4-pentanediol, 2,4-dimethyl- (C7) PO<sub>2</sub>; 2,4-pentanediol, 2-methyl- (C7) (Me-E<sub>5-10</sub>); 2,4-pentanediol, 2-methyl- (C7) PO<sub>3</sub>; 2,4-pentanediol, 3,3-dimethyl-(C7) (Me-E<sub>1-4</sub>); 2,4-pentanediol, 3,3-dimethyl- (C7) PO<sub>2</sub>; 2,4-pentanediol, 3methyl- (C6) (Me-E<sub>5-10</sub>); 2,4-pentanediol, 3-methyl- (C6) PO<sub>3</sub>;

- 1,3-hexanediol (C6) (Me-E<sub>1-5</sub>); 1,3-hexanediol (C6) PO<sub>2</sub>; hexanediol (C6) BO1; 1,3-hexanediol, 2-methyl- (C7) E2-9; 1,3-hexanediol, 2methyl- (C7) PO<sub>1</sub>; 1,3-hexanediol, 2-methyl- (C7) n-BO<sub>1-3</sub>, 1,3-hexanediol, 2methyl- (C7) BO<sub>1</sub>; 1,3-hexanediol, 3-methyl- (C7) E<sub>2-9</sub>; 1,3-hexanediol, 3-methyl-(C7) PO<sub>1</sub>; 1,3-hexanediol, 3-methyl- (C7) n-BO<sub>1-3</sub>; 1,3-hexanediol, 4/methyl- (C7) E<sub>2-9</sub>; 1,3-hexanediol, 4-methyl-(C7) PO<sub>1</sub>; 1,3-hexanediol, 4-methyl- $\frac{1}{2}$ (C7) n-BO<sub>1-3</sub>; 1,3-hexanediol, 5-methyl- (C7)  $E_{2-9}$ ; 1,3-hexanediol, 5-methyl- (C7)  $PO_1$ ; 1,3hexanediol, 5-methyl- (C7) n-BO<sub>1-3</sub>; 1,4-hexanediol (C6) (Me- $E_1/5$ ); 1,4-hexanediol (C6) PO<sub>2</sub>; 1,4-hexanediol (C6) BO<sub>1</sub>; 1,4-hexanediol, 2-meth/p- (C7) E<sub>2-9</sub>; 1,4hexanediol, 2-methyl- (C7) PO<sub>1</sub>; 1,4-hexanediol, 2-methyl-/(C7) n-BO<sub>1-3</sub>; 1,4hexanediol, 3-methyl- (C7) E<sub>2-9</sub>; 1,4-hexanediol, 3-methyl- (C7) PO<sub>1</sub>; 1,4hexanediol, 3-methyl- (C7) n-BO<sub>1-3</sub>; 1,4-hexanediol, 4-methyl- (C7) E<sub>2-9</sub>; 1,4hexanediol, 4-methyl- (C7) PO<sub>1</sub>; 1,4-hexanediol, 4-methyl- (C7) n-BO<sub>1-3</sub>; 1,4hexanediol, 5-methyl- (C7)  $E_{2-9}$ ; 1,4-hexanediol, /5-methyl- (C7)  $PO_1$ ; 1,4hexanediol, 5-methyl- (C7) n-BO<sub>1-3</sub>; 1,5-hexanediol (C6) (Me-E<sub>1-5</sub>); 1,5-hexanediol (C6) PO<sub>2</sub>; 1,5-hexanediol (C6) BO<sub>1</sub>; 1,5-hexanediol, 2-methyl- (C7) E<sub>2-9</sub>; 1,5hexanediol, 2-methyl- (C7) PO<sub>1</sub>; 1,5-hexanediol, 2-methyl- (C7) n-BO<sub>1-3</sub>; 1,5hexanediol, 3-methyl- (C7) E<sub>2-9</sub>; 1,5-hexanediol, 3-methyl- (C7) PO<sub>1</sub>; 1,5hexanediol, 3-methyl- (C7) n-BO<sub>1-3</sub>; 1,5-hexanediol, 4-methyl- (C7) E<sub>2-9</sub>; 1,5hexanediol, 4-methyl- (C7) PO<sub>1</sub>; 1,5-hexanediol, 4-methyl- (C7) n-BO<sub>1-3</sub>; 1,5hexanediol, 5-methyl- (C7)  $E_{2-9}$ ; 1,5-hexanediol, 5-methyl- (C7)  $PO_1$ ; 1,5hexanediol, 5-methyl- (C7) n-BO<sub>1-3</sub>; 1,6-hexanediol (C6) (Me-E<sub>1-2</sub>); 1,6-hexanediol (C6) PO<sub>1-2</sub>; 1,6-hexanediol (C6) n-BO<sub>4</sub>; 1,6-hexanediol, 2-methyl- (C7) E<sub>1-5</sub>; 1,6hexanediol, 2-methyl- (C7) n-BO<sub>1-2</sub>; 1,6-hexanediol, 3-methyl- (C7) E<sub>1-5</sub>; 1,6hexanediol, 3-methyl- (C7) n-BO<sub>1/2</sub>; 2,3-hexanediol (C6)  $E_{1-5}$ ; 2,3-hexanediol (C6) n-BO<sub>1</sub>; 2,3-hexanediol (C6) BO<sub>1</sub>; 2,4-hexanediol (C6) (Me-E<sub>3-8</sub>); 2,4-hexanediol (C6) PO<sub>3</sub>; 2,4-hexanediol, 2-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 2-methyl- (C7) PO<sub>1-2</sub>; 2,4-hexanediol, 3-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 3-methyl- (C7) PO<sub>1-2</sub>; 2,4-hexanediol, 4-methyl- (C7) (Me-E<sub>1-2</sub>); 2,4-hexanediol 4-methyl- (C7)  $PO_{1-2}$ ; 2,4-hexanediol, 5-methyl- (C7) (Me- $E_{1-2}$ ); 2,4-hexanediol 5-methyl- (C7) PO<sub>1-2</sub>; 2,5-hexanediol (C6) (Me-E<sub>3-8</sub>); 2,5-hexanediol (C6) PO<sub>3</sub>; 2,5-hexanediol, 2methyl- (C7) (Me-E<sub>1-2</sub>); 2,5-hexanediol 2-methyl- (C7) PO<sub>1-2</sub>; 2,5-hexanediol, 3methyl- (C7) (Me-E<sub>1-2</sub>); 2,5-hexanediol 3-methyl- (C7) PO<sub>1-2</sub>; 3,4-hexanediol (C6) EO<sub>1-5</sub>; 3,4-hexanediol (C6) n-BO<sub>1</sub>; 3,4-hexanediol (C6) BO<sub>1</sub>;
- 5. 1,3-heptanediol (C7)  $E_{1-7}$ ; 1,3-heptanediol (C7)  $PO_1$ ; 1,3-heptanediol (C7) n-BO<sub>1-2</sub>; 1,4-heptanediol (C7)  $E_{1-7}$ ; 1,4-heptanediol (C7)  $PO_1$ ; 1,4-heptanediol (C7)  $PO_{1-2}$ ; 1,5-heptanediol (C7)  $PO_{1-7}$ ; 1,5-heptanediol (C7)

PO<sub>1</sub>; 1,5-heptanediol (C7) n-BO<sub>1-2</sub>; 1,6-heptanediol (C7) E<sub>1-7</sub>; 1,6-heptanediol (C7) PO<sub>1</sub>; 1,6-heptanediol (C7) n-BO<sub>1-2</sub>; 1,7-heptanediol (C7)  $E_{1-2}$ ; 1,7-heptanediol (C7) n-BO<sub>1</sub>; 2,4-heptanediol (C7) E<sub>3-10</sub>; 2,4-heptanediol (C7) (Me-E<sub>1</sub>); 2,4-heptanediol (C7) PO<sub>1</sub>; 2,4-heptanediol (C7) n-BO<sub>3</sub>; 2,5-heptanediol (C7)  $E_{3-10}$ ; 2,5-heptanediol (C7)  $E_{3-10}$ ; 2,5-heptanediol (C7) PO<sub>1</sub>; 2,5-heptanediol (C7) n-BO<sub>3</sub>; 2,6-heptanediol (C7)  $E_{3-10}$ ; 2,6-heptanediol (C7)  $E_{3-10}$ ; 2,6-heptanediol (C7)  $E_{3-10}$ ; 2,6-heptanediol (C7)  $E_{3-10}$ ; 3,5-heptanediol (C7)

1,3-butanediol, 3-methyl-2-isopropyl- (C8) PO1; 2,4-pentanediol, 2,3,3-trimethyl- (C8) PO<sub>1</sub>; 1,3-butanediol, 2,2-diethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 2,3-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 2,4-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 2,5-dimethyl- (C8)  $E_{2-5}$ ; 2,4-hexanediol, 3,3-dimethyl- (C8)  $E_{2-5}$ ; 2,4-hexanediol, 3,4-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 3,5-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 4,5-dimethyl- (C8) E<sub>2-5</sub>; 2,4-hexanediol, 5,5-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 2,3-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 2,4-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 2,5-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 3,3-dimethyl- (C8) E<sub>2-5</sub>; 2,5-hexanediol, 3,4-dimethyl- (C8) E<sub>2-5</sub>; 3,5-heptanediol, 3-methyl- (C8) E<sub>2-5</sub>; 1,3-butanediol, 2,2diethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,3-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,4-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 2,5-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4hexanediol, 3,3-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 3,4-dimethyl- (C8) n-BO<sub>1-</sub> 2; 2,4-hexanediol, 3,5-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 4,5-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,4-hexanediol, 5,5-dimethyl-, n-BO<sub>1-2</sub>; 2,5-hexanediol, 2,3-dimethyl-(C8) n-BO<sub>1-2</sub>; 2,5-hexanediol, 2,4-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,5-hexanediol, 2,5dimethyl- (C8) n-BO<sub>1-2</sub>/2,5-hexanediol, 3,3-dimethyl- (C8) n-BO<sub>1-2</sub>; 2,5hexanediol, 3,4-dimethyl- (C8) n-BO<sub>1-2</sub>; 3,5-heptanediol, 3-methyl- (C8) n-BO<sub>1-2</sub>; 1,3-propanediol, 2-(1,2-dimethylpropyl)- (C8) n-BO<sub>1</sub>; 1,3-butanediol, 2-ethyl-2,3dimethyl- (C8) n-BO<sub>1</sub>; 1,3-butanediol, 2-methyl-2-isopropyl- (C8) n-BO<sub>1</sub>; 1,4butanediol, 3-methyl-2-isopropyl- (C8) n-BO<sub>1</sub>; 1,3-pentanediol, 2,2,3-trimethyl-(C8) n-BO<sub>1;</sub>/1,3-pentanediol, 2,2,4-trimethyl- (C8) n-BO<sub>1</sub>; 1,3-pentanediol, 2,4,4trimethyl-/(C8) n-BO<sub>1</sub>; 1,3-pentanediol, 3,4,4-trimethyl- (C8) n-BO<sub>1</sub>; 1,4pentanediol, 2,2,3-trimethyl- (C8) n-BO<sub>1</sub>; 1,4-pentanediol, 2,2,4-trimethyl- (C8) n-BO<sub>1</sub>; 1,4-pentanediol, 2,3,3-trimethyl- (C8) n-BO<sub>1</sub>; 1,4-pentanediol, 2,3,4-trimethyl-(C8) n-BO<sub>1</sub>, 1,4-pentanediol, 3,3,4-trimethyl- (C8) n-BO<sub>1</sub>; 2,4-pentanediol, 2,3,4trimethyl- (C8) n-BO<sub>1</sub>; 2,4-hexanediol, 4-ethyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 2methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 3-methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 4methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 5-methyl- (C8) n-BO<sub>1</sub>; 2,4-heptanediol, 6methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 2-methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 3methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 4-methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol,/5methyl- (C8) n-BO<sub>1</sub>; 2,5-heptanediol, 6-methyl- (C8) n-BO<sub>1</sub>; 2,6-heptanediol, 2methyl- (C8) n-BO<sub>1</sub>; 2,6-heptanediol, 3-methyl- (C8) n-BO<sub>1</sub>; 2,6-heptanediol, 4methyl- (C8) n-BO<sub>1</sub>; 3,5-heptanediol, 2-methyl- (C8) n-BO<sub>1</sub>; 1,3-propanediol, 2-(1,2-dimethylpropyl)- (C8)  $E_{1-3}$ ; 1,3-butanediol, 2-ethyl-2,3-dimethyl- (C8)  $E_{1-3}$ ; 1,3-butanediol, 2-methyl-2-isopropyl- (C8) E<sub>1-3</sub>; 1,4-butanediol, /3-methyl-2isopropyl- (C8)  $E_{1-3}$ ; 1,3-pentanediol, 2,2,3-trimethyl- (C8)  $E_{1-3}$ ; 1,3-pentanediol, 2,2,4-trimethyl- (C8)  $E_{1-3}$ ; 1,3-pentanediol, 2,4,4-trimethyl- (C8)  $E_{1-3}$ ; 1,3pentanediol, 3,4,4-trimethyl- (C8) E<sub>1-3</sub>; 1,4-pentanediol, 2,2,3-trimethyl- (C8) E<sub>1-3</sub>; 1,4-pentanediol, 2,2,4-trimethyl- (C8) E<sub>1-3</sub>; 1,4-pentanediol, 2,3,3-trimethyl- (C8)  $E_{1-3}$ ; 1,4-pentanediol, 2,3,4-trimethyl- (C8)  $E_{1-3}$ ; 1,4-pentanediol, 3,3,4-trimethyl-(C8) E<sub>1-3</sub>; 2,4-pentanediol, 2,3,4-trimethyl- (C8) E<sub>1-3</sub>; 2,4-hexanediol, 4-ethyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol, 2-methyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol, 3-methyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol, 4-methyl- (C8)  $E_{1-3}$ ; 2,4-heptanediol,  $5_7$  methyl- (C8)  $E_{1-3}$ ; 2,4heptanediol, 6-methyl- (C8)  $E_{1-3}$ ; 2,5-heptanediol, 2/methyl- (C8)  $E_{1-3}$ ; 2,5heptanediol, 3-methyl- (C8) E<sub>1-3</sub>, 2,5-heptanediol, A-methyl- (C8) E<sub>1-3</sub>, 2,5heptanediol, 5-methyl- (C8)  $E_{1-3}$ ; 2,5-heptanediol/6-methyl- (C8)  $E_{1-3}$ ; 2,6heptanediol, 2-methyl- (C8) E<sub>1-3</sub>; 2,6-heptanediol, 3-methyl- (C8) E<sub>1-3</sub>; 2,6heptanediol, 4-methyl- (C8) E<sub>1-3</sub>; and/or 3,5-heptanediol, 2-methyl- (C8) E<sub>1-3</sub>; and 7. mixtures thereof,

IX. aromatic diols including: 1-phenyl-1,2-ethanediol; 1-phenyl-1,2-propanediol; 2-phenyl-1,2-propanediol; 3-phenyl-1,2-propanediol; 1-(3-methylphenyl)-1,3-propanediol; 1-(4-methylphenyl)-1,3-propanediol; 2-methyl-1-phenyl-1,3-propanediol; 1-phenyl-1,3-butanediol; 3-phenyl-1,3-butanediol; 1-phenyl-1,4-butanediol; and/or 1-phenyl-2,3-butanediol;

X. solvents which have a ClogP value of from about 0.15 to about 0.64 and are homologs, or analogs, of the above structures where one, or more, CH<sub>2</sub> groups are added while, for each CH<sub>2</sub> group added, two hydrogen atoms are removed from adjacent carbon atoms in the molecule to form one carbon-carbon double bond, thus holding the number of hydrogen atoms in the molecule constant, including the following:

1,3-Propanediol, 2,2-di-2-propenyl-; 1,3-Propanediol, 2-(1-pentenyl)-; 1,3-Propanediol, 2-(2-methyl-2-propenyl)-2-(2-propenyl)-; 1,3-Propanediol, 2-(3-methyl-1-butenyl)-; 1,3-Propanediol, 2-(4-pentenyl)-; 1,3-Propanediol, 2-ethyl-2-(2-propenyl)-; 1,3-Propanediol, 2-methyl-2-(3-methyl-3-butenyl)-; /1,3-Butanediol, 2,2-diallyl-; 1,3-Butanediol, 2-(1-ethyl-1-propenyl)-; 1,3-Butanediol, 2-(2-butenyl)-2-methyl-; 1,3-Butanediol, 2-(3-methyl-2-methyl-; 1,3-Butanediol, 2-(3-methyl-2-methyl-2-methyl-; 1,3-Butanediol, 2-(3-methyl-2-methyl-2-methyl-2-methyl-; 1,3-Butanediol, 2-(3-methyl-2-met

butenyl)-, 1,3-Butanediol, 2-ethyl-2-(2-propenyl)-, 1,3-Butanediol, 2-methyl-2-(1methyl-2-propenyl)-; 1,4-Butanediol, 2,3-bis(1-methylethylidene)-; 1,4-Butanediol, 2-(3-methyl-2-butenyl)-3-methylene-; 2-Butene-1,4-diol, 2-(1,1-dimethylpropyl)-; 2-Butene-1,4-diol, 2-(1-methylpropyl)-; 2-Butene-1,4-diol, 2-butyl-; 1/3-Pentanediol, 2-ethenyl-3-ethyl-; 1,3-Pentanediol, 2-ethenyl-4,4-dimethyl-; 1,4/Pentanediol, 3methyl-2-(2-propenyl)-; 1,5-Pentanediol, 2-(1-propenyl)-; 1,5-Pentanediol, 2-(2propenyl)-; 1,5-Pentanediol, 2-ethylidene-3-methyl-; 1,5-Pentanediol, 2-propylidene-; 3-ethylidene-2,4-dimethyl-; 4-Pentene-1.3-diol. 2,4-Pentanediol, dimethylethyl)-; 4-Pentene-1,3-diol, 2-ethyl-2,3-dimethyl-; 1,4-Hexanediol, 4-ethyl-2-methylene-; 1,5-Hexadiene-3,4-diol, 2,3,5-trimethyl-; 1,5/Hexadiene-3,4-diol, 5ethyl-3-methyl-; 1,5-Hexanediol, 2-(1-methylethenyl)-; 1,6-Hexanediol, 2-ethenyl-; 1-Hexene-3,4-diol, 5,5-dimethyl-; 1-Hexene-3,4-diol, 5,5-dimethyl-; 2-Hexene-1,5diol, 4-ethenyl-2,5-dimethyl-; 3-Hexene-1,6-diol, 2-ethenyl-2,5-dimethyl-; 3-Hexene-1,6-diol, 2-ethyl-; 3-Hexene-1,6-diol, 3,4-dimethyl-; 4-Hexene-2,3-diol, 2,5dimethyl-; 4-Hexene-2,3-diol, 3,4-dimethyl-; 5-Hexene-1,3-diol, 3-(2-propenyl)-; 5-Hexene-2,3-diol, 2,3-dimethyl-; 5-Hexene-2,3-diol, 3,4-dimethyl-; 5-Hexene-2,3diol, 3,5-dimethyl-; 5-Hexene-2,4-diol, 3-ethenyl-2,5-dimethyl-; 1,4-Heptanediol, 6methyl-5-methylene-; 1,5-Heptadiene-3,4-diøl, 2,3-dimethyl-; 1,5-Heptadiene-3,4diol, 2,5-dimethyl-; 1,5-Heptadiene-3,4-diol, 3,5-dimethyl-; 1,7-Heptanediol, 2,6bis(methylene)-; 1,7-Heptanediol, 4-methylene-; 1-Heptene-3,5-diol, 2,4-dimethyl-; 1-Heptene-3,5-diol, 2,6-dimethyl-; 1-Heptene-3,5-diol, 3-ethenyl-5-methyl; 1-Heptene-3,5-diol, 6,6-dimethyl-, 2,4-Heptadiene-2,6-diol, 4,6-dimethyl-; 2,5-Heptadiene-1,7-diol, 4,4-dimethyl-; 2,6-Heptadiene-1,4-diol, 2,5,5-trimethyl-; 2-Heptene-1,4-diol, 5,6-dimethyl-; 2-Heptene-1,5-diol, 5-ethyl-; 2-Heptene-1,7-diol, 2methyl-; 3-Heptene-1,5-diol, 4,6-dimethyl-; 3-Heptene-1,7-diol, methylene-; 3-Heptene-2,5-diol, 2,4-dimethyl-; 3-Heptene-2,5-diol, 2,5-dimethyl-, 3-Heptene-2,6-diol, 2,6-dimethyl-; 3-Heptene-2,6-diol, 4,6-dimethyl-; 5-Heptene-1,3diol, 2,4-dimethyl-; 5-Heptene-1,3-diol, 3,6-dimethyl-; 5-Heptene-1,4-diol, 2,6dimethyl-; 5-Heptene-1,4-diol, 3,6-dimethyl-; 5-Heptene-2,4-diol, 2,3-dimethyl-; 6-Heptene-1,3-diol, 2,2-dimethyl-; 6-Heptene-1,4-diol, 4-(2-propenyl)-; 6-Heptene-1,4-diol, 5,6-dimethyl-; 6-Heptene-1,5-diol, 2,4-dimethyl-; 6-Heptene-1,5-diol, 2ethylidene-6-methyl-: 6-Heptene-2,4-diol, 4-(2-propenyl)-; 6-Heptene-2,4-diol, 5,5dimethyl-, 6-Heptene-2,5-diol, 4,6-dimethyl-, 6-Heptene-2,5-diol, 5-ethenyl-4methyl-; 1,3-Octanediol, 2-methylene-; 1,6-Octadiene-3,5-diol, 2,6-dimethyl-; 1,6-Octadiene-3,5-diol, 3,7-dimethyl-; 1,7-Octadiene-3,6-diol, 2,6-dimethyl-; 1,7-Octadiene-3,6-diol, 2,7-dimethyl-; 1,7-Octadiene-3,6-diol, 3,6-dimethyl-; 1-Octene-3,6-diol, 3-ethenyl-; 2,4,6-Octatriene-1,8-diol, 2,7-dimethyl-; 2,4-Octadiene-1,7-diol,

- 3,7-dimethyl-, 2,5-Octadiene-1,7-diol, 2,6-dimethyl-; 2,5-Octadiene-1,7-diol, 3/7dimethyl-, 2,6-Octadiene-1,4-diol, 3,7-dimethyl- (Rosiridol); 2,6-Octadiene-1,8/diol, 2-methyl-, 2,7-Octadiene-1,4-diol, 3,7-dimethyl-; 2,7-Octadiene-1,5-diol,/2,6dimethyl-, 2,7-Octadiene-1,6-diol, 2,6-dimethyl- (8-Hydroxylinalool); 2,7-Octadiene-1,6-diol, 2,7-dimethyl-, 2-Octene-1,4-diol, 2-Octene-1,7-diol, 2-Octene-1,7-diol, 2methyl-6-methylene-; 3,5-Octadiene-1,7-diol, 3,7-dimethyl-; 3,5-Octadiene-2,7-diol, 2,7-dimethyl-; 3,5-Octanediol, 4-methylene-; 3,7-Octadiene-1,6-diol, 2,6-dimethyl-, 3,7-Octadiene-2,5-diol, 2,7-dimethyl-, 3,7-Octadiene-2,6-diol, 2,6-dimethyl-, 3-Octene-1,5-diol, 4-methyl-; 3-Octene-1,5-diol, 5-methyl-; 4,6-Octadiene-1,3-diol, 2,2-dimethyl-; 4,7-Octadiene-2,3-diol, 2,6-dimethyl-; 4,7-Octadiene-2,6-diol, 2,6dimethyl-; 4-Octene-1,6-diol, 7-methyl-; 2,7-bis(methylene)-; 2-methylene-; 5,7-Octadiene-1,4-diol, 2,7-dimethyl-; 5,7-Octadiene-1,4-diol, 7-methyl-; 5-Octene-1,3diol; 6-Octene-1,3-diol, 7-methyl-; 6-Octene-1,4-diol, 7-methyl-; 6-Octene-1,5-diol, 6-Octene-1,5-diol, 7-methyl-, 6-Octene-3,5-diol, 2-methyl-/6-Octene-3,5-diol, 4methyl-, 7-Octene-1,3-diol, 2-methyl-, 7-Octene-1,3-diol, A-methyl-, 7-Octene-1,3diol, 7-methyl-, 7-Octene-1,5-diol, 7-Octene-1,6-diol, 7-Octene-1,6-diol, 5-methyl-, 7-Octene-2,4-diol, 2-methyl-6-methylene-; 7-Octene-2,5-diol, 7-methyl-; 7-Octene-3,5-diol, 2-methyl-; 1-Nonene-3,5-diol; 1-Nonene-3,7-diol, 3-Nonene-2,5-diol; 4,6-Nonadiene-1,3-diol, 8-methyl-; 4-Nonene-2,8-diol/ 6,8-Nonadiene-1,5-diol, 7-Nonene-2,4-diol; 8-Nonene-2,4-diol; 8-Nonene-2,5-diol; 1,9-Decadiene-3,8-diol, and/or 1,9-Decadiene-4,6-diol; and
  - MI mixtures thereof, said principal solvent containing insufficient amounts of solvents selected from the group consisting of: 2,2,4-trimethyl-1,3-pentane diol; the ethoxylate, diethoxylate, or triethoxylate derivatives of 2,2,4-trimethyl-1,3-pentane diol; and/or 2-ethylhexyl-1,3-diol, to provide an aqueous stable product;
  - optionally, but preferably, an effective amount, sufficient to improve clarity, of low molecular weight water soluble solvents like ethanol, isopropanol, propylene glycol, 1,3-propanediol, propylene carbonate, etc., said water soluble solvents being at a level that will not form clear compositions by themselves;
  - D. optionally, but preferably, an effective amount to improve clarity, of water soluble calcium and/or magnesium salt, preferably chloride; and
  - E. the balance being water.
  - 52. A composition according to Claim 51 wherein said principal solvent B. is present at an effective amount, but less than the amount required to achieve stability and the composition is made stable by addition of another solvent that is itself inoperable to achieve stability.

53. The process of making a clear fabric softening composition using the premix of Claim 47 and adding said premix to a water seat comprising water; acid to create a pH of from about 1.5 to about 5; and, optionally, an effective amount of water soluble calcium and/or magnesium salt.

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- 54. The process of making a solvent mixture of Claim 6 comprising the condensation of butyraldehyde, isobutyraldehyde and/or methyl ethyl ketone (2-butanone), so long as the level of butyraldehyde, or isobutyraldehyde is less than about 95% of the reaction mixture, in the presence of highly alkaline catalyst followed by conversion by hydrogenation.
- 55. The process of Claim 54 wherein the level of butyraldehyde, or isobutyraldehyde is less than about 85% of the reaction mixture.
- 56. The process of Claim 54 wherein the level of butyraldehyde, or isobutyraldehyde is less than about 80% of the reaction mixture.
- 57. The mixture prepared by the process of Claim 54.